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FOUR-YEAR ECONOMIC PROGRAM FOR THE PHILIPPINES

FISCAL YEARS 1967 - 1970

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Manila
September 1966

SUMMARY OF THE PHILIPPINE ECONOMIC PROGRAM

Basic Problems

1. Dualistic economy, with two-thirds of population supported by primitive agricultural sector. Efficiency of food production must be improved, both to release resources for industry and to raise farm incomes so that agricultural population can be a mass market for industrial products.

2. Population growth rate of 3.2 percent annually, one of the fastest in the world.

3. Substantial and growing unemployment; about 12 per cent of labor force, including underemployed converted to equivalent number of fully unemployed.

4. Adverse movement of terms of international trade. Capital equipment is still mostly imported. The country's exports are mostly primary mineral and agricultural products. On the world market, prices of machinery tend to increase; prices of primary products to decline.

5. Large requirments for investment in public works facilities, which have failed to cope with the country's growing needs. The most pressing are for irrigation and roads.

General Objective

To increase real per capita income by about two and a half per cent annually. This means that real GNI must grow at an average 6.2 percent over the next four-years. Agricultural output must grow at 4 per cent, and mining and manufacturing output by 8.4 per cent annually.

More important, foreign capital must be attracted in the amount of ₱3.2 billion to finance the difference between the large required investment and domestic savings.

Particular Objectives

To implement the major projects designed to achieve these targets. Of these, the most important are:

1. A public works program aggregating ₱3.1 billion over the next four years, including ₱960.4 million for roads and ₱293.6 million for irrigation.

2. A Land Reform program of which the most important expenditures are ₱141.4 million for the capital program of the Land Authority and ₱125.6 for the operations of the Land Bank.

3. A group of fifteen high priority industrial projects with a total cost of ₱1.3 billion

The priority programs and projects are listed in three tables below, as follows:

Table 1. Public Works Investment Program

Table 2. Priority Projects for Industrial Development Program

Table 3. Priority Projects for Agricultural Development Program

Table 1

Public Works Investment Program
Fiscal Years 1967-1970
(Million Pesos)

		FY 1967	FY 1968	FY 1969	FY 1970	Total
1.	Highways	128.4	331.0	228.5	272.5	960.4
2.	Portworks	21.0	29.4	34.0	35.0	119.4
3.	Airports	13.1	17.9	28.0	33.0	92.0
4.	Air Navigation	3.1	13.1	13.1	13.2	42.5
5.	Railroad	10.0	40.0	60.0	80.0	190.0
6.	Telecommunications	21.8	24.8	38.1	38.5	123.2
7.	Power Development	95.3	97.8	69.5	22.5	285.1
8.	Rural Electrification	5.0	8.0	10.0	12.0	35.0
9.	Waterworks	149.7	77.0	35.0	37.5	299.2
10.	Artesian Wells	7.1	7.1	7.1	7.1	28.4
11.	Irrigation	67.5	78.2	74.4	73.5	293.6
12.	River Control	10.0	12.0	17.0	21.0	60.0
13.	National Bldgs.	13.0	15.3	16.2	14.0	58.5
14.	Hospital and Sanitarium	6.9	8.3	14.4	15.7	45.7
15.	Shore Protection	1.0	1.0	1.0	1.0	4.0
16.	School Buildings	29.1	50.0	50.0	50.0	179.1
17.	Community Development Projects	35.0	35.0	35.0	35.0	140.0
18.	Preliminary Engineering	2.0	4.0	4.0	4.0	14.0
	[illegible]					
	Total Public Works Expenditues	657.8	870.4	765.5	797.8	3,091.5

Table 2

PRIORITY INDUSTRIAL PROJECTS FOR INDUSTRIAL DEVELOPMENT PROGRAM

Project Category	Number of Plant (s) or Expansion	Aggregate Annual Capacity	Estimated Cost of Project** (Million) Pesos	Dollars	Total In Pesos
A. **High Priority Projects**					
1. Integrated Wood Processing	4	270 million sq. ft.	₱ 18.8	$5.3	₱39.5
2. Integrated Pulp & Paper	2	152,670 MT. (Paper)	202.7	45.0	378.2
3. Industrial Salt	1*	50,000 MT	3.6	0.5	5.6
4. Soda Ash	1	60,000 MT	6.0	3.2	18.3
5. Fertilizer	1*	65,000 MT. Urea or 100,000 MT $(NH_4)_2SO_4$	42.0	7.5	71.4
6. Polyethelene	1	3,000 MT.	2.6	1.6	8.9
7. Anti-Biotics	1	11,020 M Grains	6.3	3.8	21.2
8. Cement	7*	72 Million Bags	147.1	52.0	349.9
9. Refractories	1	30,000 MT	5.8	1.8	12.7
10. Coke Plant	2	320,000 MT	32.3	11.2	76.0
11. Surigao Laterite	1	6,500 MT. Ni, & 250,000 MT. Steel	35.0	36.2	176.7
12. Copper	1	17,000 MT.	40.0	12.0	86.8
13. Ferro-Alloys	Exp.	10,000 MT.	3.8	1.1	7.9
14. Agricultural Machinery	4	(Various items)	20.0	7.0	47.3
15. Ship Building	Exp.	1 Ship of 1,700 GT.	45.0	1.0	49.7
Total, 15 Priority Projects			611.0	189.2	1,348.9

Table 3

Priority Projects for Agricultural Development Program

		Requirements FY 1967-70 (Million Pesos)
	Land Reform	
1.	Land Authority Capital program	141.4
2.	Land Bank operations (Includes financing of first four years of program for acquisition of 191,000 hectares of large estate for redistribution to 64,000 leaseholders)	125.6
3.	Production credit extension to 437,000 farmers working 931,000 hectare	210.6
4.	Machinery credit extension on long-term to farmers in 11 provinces	113.4
	Production Improvement	
5.	Irrigation: 87 systems, increasing irrigated area by 298,000 hectares	245.8*
6.	Replacement 15 reconditioning of 4,000 primitive rice mills	30.0
7.	Liguasan marsh reclamation (survey only)	3.9
8.	Milk collection centers	0.6
9.	Navotas fishing port (survey only)	1.0
10.	Soybean development program	0.1
	Conservation	
11.	Pilot forest protection program	1.5
	Total (less irrigation)	628.1

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* Incorporated in Public Works program

I GENERAL GOALS AND POLICIES

Introduction

1. This Program presents a blueprint for the development of the Philippine economy during the period from Fiscal year 1967 to Fiscal year 1970.

2. It outlines the aggregate targets which the economy will seek to achieve during this four-year period, to provide the growing population with rising levels of living.

3. It spells out in some detail the investment program that will be attempted by the government.

4. It also identifies a few strategic investment areas for the private sector, with a definite commitment of government assistance in the implementation of the requisite projects.

5. The Program is thus in two parts: a set of aggregate targets for the national economy, together with their implications for financing and monetary stability; and a collection of projects which the government considers of the highest priority in terms of contribution to national targets, behind which the government has thrown its full support, and which it proposes to submit for foreign financing if domestic sources prove insufficient.

6. Of these two parts, the more meaningful is the second. The success of this Program.may well be judged by the number of these projects that the government is able to get implemented.

Situation, Problems and Strategy

7. The Philippine economy, despite the progress achieved in the past 20 years, continues to be essentially a dualistic economy.

8. At the time the country gained independence in July 1946, the economy was characterized by a colonial structure, with the majority of the population engaged in traditional agriculture and a small minority engaged in a modern sector producing primary products for exports. In the fifties, organized manufacturing developed in response to incentives proferred by the Government. Despite its impressive growth, the manufacturing base is still narrow consisting essentially of consumer goods industries dependent on imported raw materials. By 1965, two-thirds of the population earned their livelihood from agricultural activities. Moreover, 49 per cent of the population were in the dependent age group. Economic developments during the past years have also been accompanied by an increasing inequality in the distribution of income within income groups as well as between rural and urban families.

9. The economy is dualistic in yet another sense. Economic activities are carried out not solely on the basis of economic rationality but also of social and political customs; the latter more often than not prevailing over the former. This stems partly from the family oriented social structure and partly from the patronage system imbedded in the country's political institutions.

10. The basic economic problem is the inadequacy of the dualistic economy to support a rising standard of living for the country's rapidly growing population. On the one hand, the tradition-bound agricultural sector does not produce enough surplus food and basic raw materials needed for inputs to domestic industry and for exports. On the other hand, the progress attained in the modern export and industrial sector does not spread out to the agricultural sector. As a result, the population engaged in traditional agriculture, with its low income level, does not provide an adequate market to support an expansion in manufacturing activities. In the meantime, population is growing at the rate of 3.2 per cent a year,

11. One other major consequence of the separation between the two sectors is the substantial and growing unemployment situation. In 1965, the number of totally unemployed persons rose to nearly 950,000 or 8.2 per cent of the labor force. In addition, substantial underemployment, equivalent to nearly 550,000 of fully unemployed (based on a 40-hour week) existed.

12. The second basic problem of the economy is introduced by external factors, consisting of the tendency of the terms of international trade to favor industrial goods at the expense of primary export products. This adverse development stems primarily from the fact that increases in productivity in industrial countries are reflected in higher wages while in primary producing countries such increases are reflected in a decline in world prices. The deterioration in the terms

of trade against primary exporting countries is accentuated by the bias of technological progress towards economizing the use of natural raw materials.

13. Arrayed against these problems are several assets of the economy. One of the most important is the high educational level in the Philippines, much higher than in many other developing countries. The rate of literacy is 75 per cent and the number of graduates from institutions of higher learning has exceeded the capacity of the economy to absorb them. This has engendered the benefit, although by no means unmixed, of additional income from the export of their services.

14. An equally important asset is the aggressive entrepreneurial class and the core of skilled labor that have been developed during the past fifteen years.

15. A third important asset of the country is the stable political institution which has been epitomized by the peaceful turnover of the mantle of power in consonance with the results of balloting. The freedom of the ballot and the strict compliance with its results are illustrated by the fact that no chief executive has been re-elected to a second full term.

16. Finally, the export structure of the Philippines is diversified, covering a wide range of products, albeit mainly primary commodities. Thus, total exports expanded by about 12 per cent between FY 1965 and FY 1966 despite the more than 5 per cent decline in the combined export value of coconut products, sugar and abaca; three products which accounted for 58 per cent of total exports in the earlier years.

17. Considering these characteristics of the Philippine economy, the strategy of economic development adopted in the Program consists of integrating the traditional and modern sectors of the economy and fostering the increasing use of rationality in the decision making processes of economic activities. In this way, a more efficient allocation of resources is expected to be accomplished, bringing about larger output and more numerous job opportunities.

18. The integration of the two sectors will be accompanied by a vigorous policy of import substitution and promotion of an even more diversified exports.

19. Finally, to solve the unemployment problem, the rate of investment will have to be increased. While capital formation will depend mainly on domestic effort, foreign assistance will be sought to accelerate the integration of the economy. In addition, the magnitude of investments called for in the modern industrial sector can be met more easily through the partnership of domestic and foreign venture capital. This is particularly true in view of the continued reliance on imported capital goods expected during the Program period.

20. On the part of the public sector, this strategy means moulding the government institutions into more effective instruments for economic development and channeling a larger proportion of their resources into productive investments. The challenge to statemanship is to be able to convince politicians that good economic performance is better politics.

21. On the part of the private sector, the task before them is to build on the entrepreneurship spawned during the past fifteen years, discovering and developing new methods of producing more out of available resources. The process of economic development will operate within the accepted framework of free enterprise wherein the private sector will continue to play the dominant role.

Framework Of The Development Program

22. The pace of development during the plan period FY 1967-FY 1970 will depend mainly on the initiative of the private sector. To a lesser but still significant extent, the success of the Program will depend on the efficiency of the Government in accommodating economic rationality in its political decision processes and in fostering the integration of the two sectors of the economy. Given the effectiveness of these two internal factors, the rate of development will be limited only by the constraints imposed by the balance of international payments.

23. Over the four-year plan period, the Program aims at increasing the annual rate of growth of per capita real income from its level of 0.9 per cent in FY 1961-FY 1965 to 2.4 per cent.

24. Since the population of the Philippines will most likely grow at the same rapid rate of 3.2 per cent annually, real national income will have to rise by an average 5.7 per cent a year in order that the target increase in per capita income will be attained. Correspondingly, gross national product will have to rise at an average annual rate of 6.2 per cent. The plan targets are summarized in the following table:

PHILIPPINES: TARGETS FOR ECONOMIC DEVELOPMENT
FY 1966-FY 1970
(Million pesos at 1965 prices)

Item	FY 1965/66 (Preliminary)	FY 1969/70 (Target)	Annual Growth Rate (%)
Gross National Product	20,500	26,140	6.2
National Income	17,370	21,720	5.7
Agriculture, Forestry & Fishing	5,630	6,590	4.0
Mining & Manufacturing	3,610	4,980	8.4
Construction	630	870	8.4
Trade	2,130	2,670	5.8
Transport & Communications	470	590	5.8
Other Services	4,900	6,020	5.3

25. To attain this objective, the rate of investment will have to increase from 14.6 per cent of gross national product in FY 1962-FY 1966 to 21.3 per cent during the plan period. For the four-year plan period, the projected investments aggregate P20.3 billion as compared to a total of P10.1 billion for the preceding four-year period and, thus, represents an increase over 100 per cent.

26. With the increasing tempo of economic activities envisaged in the Program, enough employment opportunities are expected to be generated to absorb the new entrants to the labor force and reduce unemployment and underemployment from 13.0 per cent to 7.2 per cent of the labor force by FY 1970. Rises in productivity per worker are projected for agriculture, industry, trade and services; these rises are due basically to the magnitude and composition of the proposed invest-

ments. The rise in agricultural productivity is premised on (1) the integration of the two sectors of the economy; (2) increasing intensification in the use of the land as a result of larger availability of irrigation, fertilizers, and improved seeds; and (3) the increase in non-agricultural job opportunities. In the case of industry, the trend towards intermediate and basic production activities will significantly increase productivity per worker.

EMPLOYMENT PROJECTIONS, FY 1965, FY 1967-FY 1970
(In Thousands)

Sector	Actual May, 1965	Increase In FY 1967-FY 1970
Employment		
Agriculture	6,050	695
Mining & Manufacturing	1,250	370
Construction	300	120
Trade	1,120	230
Transport & Communications	390	95
Other Services	1,430	265
Total Employed	10,540	1,775
of which: Underemployed	550*	
Unemployed	950	-550
Labor Force	11,490	1,225

* Equivalent number of fully unemployed based on a 40-hour week work schedule.

27. Of the total capital formation required, investments of the National Government will account for ₱3.5 billion or 19 per cent, seven-

tenths of which are earmarked for infrastructure projects. These investments will mainly implement the strategy of integrating the economy's traditional and modern sectors. Priority will thereby be given to the following government projects:

a. Roads and bridges

  Main highways
  Bridges
  Feeder roads

b. Portworks
c. Irrigation and agricultural services
d. Land reform
e. Agricultural production credit
f. Rural electrification

28. The private sector is expected to assume the major portion of the required capital formation. For the four-year plan period, private investments are projected at ₱15.1 million or 81 per cent of the required total investments. The Government considers the following impact projects of critical importance to the success of the Development Program, and, therefore, is prepared to assist the private sector in developing and implementing these projects:

a. Wood processing
b. Pulp and paper
c. Basic industrial chemicals
d. Fertilizer
e. Anti-biotics
f. Cement
g. Coke and refractories
h. Surigao laterite
i. Copper and ferro-alloys
j. Agricultural machinery
k. Ship-building

Public Investment Program

29. One of the important characteristics of the Philippine political institutions is the centralization of government investment activities in the National Government with but very few exceptions. Roads and bridges, portworks, irrigation facilities, railways, public power generation, airports, and education are almost entirely under the aegis of the central government. There is, moreover, one important constraints on the construction of roads and bridges in the form of a pre-determined allocation of funds among the different provinces in the country.

30. The public sector development expenditure program encompasses the investments of the National Government. The projects selected are designed to facilitate the integration of the two sectors of the economy and provide the infrastructure facilities necessary to support the projected expansion of economic activities during the plan period.

31. Public investments for FY 1967-FY 1970 have been projected at P3.1 billion, almost double the P1.7 billion invested in the preceding four-year period. The bulk of the investments is allocated to the construction of infrastructure facilities which would improve the flow of products between the two sectors of the economy and open up agricultural areas presently devoted to subsistence production to market incentives. This will be supported by concerted efforts for increasing agricultural productivity, with particular emphasis on rice and corn. Irrigation facilities will be improved and expanded, a larger supply of high-yielding seeds will be provided and agricultural extension

services will be more readily available. These will be accompanied with a vigorous implementation of land reform which, in bringing about a better distribution of the gains in production, will provide an incentive to farmers to continue increasing production.

PHILIPPINES: PUBLIC INVESTMENT EXPENDITURE PROGRAM, FY 1963-FY 1970*
(₱ Million)

Item	Total Expenditures FY 1967-1970
Irrigation	294
Roads and Bridges	960
Portworks	119
Aviation	135
Railways	190
Power	320
Water	328
Communications	123
Other Infrastructure	623
Total Infrastructure	3,092
Developmental Services and Capital Transfers	4,846
Total Public Investment	7,938

Policy Guidelines

32. The implementation of the Development Program is a major undertaking which can be accomplished only if all segments of society will participate positively with a higher degree of discipline than heretofore. A moral and spiritual reorientation is called for to cultivate positive thinking based on self-discipline in work, in business and in social and political life.

33. The government machinery for development has to be overhauled to make possible the increasing use of economic rationality, as distinguished from social and ward-politics considerations, in the planning and implementation of the public investment program.

34. Discipline of the highest order will be required in fiscal and monetary operations to forestall the emergence of excessive inflationary pressures. Inflation would shift the burden to the low income group whose economic betterment is the essence of the Program. It would engender a distortion in the pattern of investments, a luxury which the economy can ill afford. The disturbance of monetary stability is also likely to act as a deterrent to the inflow of external assistance, reducing the resources available for investments and thereby impede the pace of economic development.

35. It is a major imperative of development under this Program that the exchange rate be kept stable at the prevailing level. The Program has also been formulated to be implemented within the institutional framework of free international transactions.

36. Tax reforms will be undertaken to discourage affluent consumption and non-productive ventures. On the other hand, the tax system shall be used to provide incentives which would influence private enterprise towards desirable lines of investments.

II. PUBLIC WORKS AND SOCIAL DEVELOPMENT PROGRAM

1. Public Works and Social Development comprise what is in effect the total of the government's direct expenditures on economic development. (The Economic Development Budget also includes comparatively small amounts for inter-government capital transfers.)

2. Public works are the government's direct capital formation expenditures. Social Development outlays, while not resulting in the construction of physical facilities, provide essential support, in such forms as education, health and community development. On these two portions of the program the government proposes to spend a total of about ₱7 billion over the next four fiscal years.

Public Works

3. To give the economy the capability of expanding both agriculture and industry and, at the same time, provide the fast-growing population with the basic services and facilities for the uplift of its liv living standards are the basic reasons for the maintenance, improvement, and expansion of the country's public works facilities.

4. The public works program includes mainly (a) the country's transportation network and transport units, of roads, railroads, ports and harbors, airports, motor vehicles, seacraft and aircraft; (b) a system of telecommunication to service domestic and overseas needs, the inadequacy of which is a major retarding force to a country's growth;

and (c) the facilities for controlling and harnessing water resources for the prevention of floods, for irrigation, for power, and for providing households and industry with continuing and reliable supply of clean water. It treats also of the country's capacity for generating, transmitting and distributing electric power in the most economic and efficient means to all the regions that require it. Finally, it includes the buildings, plants and other facilities provided by the government offices, public hospitals and schools, and for low-cost shelter to low-income families.

5. For various reasons, the government has been able in recent years to spend only minimal amounts on the expansion and maintenance of public works facilities. The result is that for the most part these facilities are inadequate by the most generous standards.

6. While an extensive road network is in existence, most of the roads are in poor repair and can handle safely and efficiently only a fraction of the fast-growing traffic of passengers and commodities. As a result, transportation costs become higher, perishable commodities cannot reach the market fast enough and maintenance of vehicles become more expensive. Likewise, maintenance of these road facilities increases disproportionately.

7. For these reasons, the highways program will stress, as a first priority, the rehabilitation, restrengthening and upgrading of presently existing and heavily-used routes. At present, of approximately 56,000 kilometers of roads in existence, about 95% is made up of low-type materials and of the total of 244,000 lineal meters of

bridges, about 65% is of temporary construction. In the national road system alone, 85.5% of the roads is of a low-type category and 47.5% of the bridges is temporary.

8. The magnitude of the improvement and construction work that has to be done on the road system is great. For the main trunklines alone, over 10,000 kilometers of roads need resurfacing. Upgrading of roads requires an investment of ₱5,700 million, replacing temporary bridges would cost ₱467 million, improving physical features and relocating is estimated at ₱200 million and constructing 60,000 kilometers of new roads would involve ₱1,800 million.

9. Total cost to provide adequate road facilities adds up to ₱8,167 million. This sum substantially exceeds the resources so that there is clearly present the problem of allocation, of channeling limited resources to the highest priority roads.

10. Completion of relief traffic facilities such as the Manila North and South Diversion Roads, the Epifanio de los Santos Highway and the Guadalupe Bridge, and the Nagtahan Bridge in Manila will be pursued at the initial period. Concrete paving of sections of low sufficiency rating at the Cagayan Valley Road and the Manila South Road will immediately be initiated. Structural upgrading of scattered sections at the Manila North Road will be undertaken. IReconstruction of critical bottlenecks at the Mindanao Circumferential Road and improvement and construction of a North to South route at the islands of Leyte and Samar will likewise be undertaken. This, in

effect, is a development of component facilities which would integrate into a Pan-Philippine Highway System.

11. In order to prepare the groundwork for a massive construction program, procurement through Reparations of construction equipment and structural materials amounting to $41 million is scheduled for the early part of the program period.

12. Also, ports and harboars are short of berthing and storage space and many require extensive dredging. While there are 352 ports existing throughout the Islands - 74 are national ports; the rest are of local importance and are under municipal supervision -, there are only 231 berths available to serve an average of 1,815 calls per week of ocean-going and inter-island ships.

13. The most critical conditions obtain in the Port of Manila, which handles 80% of the country's import trade and serves as the principal center for internal commerce. To overcome the deficiency in handling facilities, the program for the Port of Manila includes the completion of 14 additional berths for overseas shipping, the completion of 7 additional berths for domestic shipping, the increase of navigational depth from 35 feet to the required 42 feet for ocean-going vessels, construction of transit sheds with a total area of 67,088 square meters, reclamation and development of 85 hectares of port area and construction of a fisherman's basin to handle the fishing fleet.

14. Improvement in other national ports to increase their capacities is envisioned. Expanded accommodation facilities will be

provided at the ports of Curimao in Ilocos Norte, San Fernando in La Union, Batangas in Batangas, Jose Panganiban in Camarines Norte, Tabaco in Albay, Aparri in Cagayan, Iloilo City in Iloilo, Pulupandan in Negros Occidental, Tacloban in Leyte, Cagayan de Oro in Misamis Oriental, Cotabato in Cotabato, Sta. Ana and Sasa in Davao, Pagadian and Zamboanga City in the Zamboangas, among others.

15. Existing airport facilities in the country consist of eight trunkline, twenty-three secondary and eighty nine feeder airports. In general, the development of ground facilities has not kept pace with the growth of air traffic. Over the past four years, passenger-miles increased by 23.2 per cent annually on the average, and revenue ton-miles grew at an average of 18.9 per cent annually.

16. The conditions of the airports are not conducive to a progressive growth of air transport for the next few years. Some airports need relocation to permit the construction of longer runways. In most airports, runways, taxiways, and aprons are deficient in strength, surfacing and dimensions. Landing and other air navigational aids are very much lacking.

17. The targets set for the airport development program are to upgrade trunkline airports to accommodate intermediate-range jets, expand secondary airports to enable prop-jet aircrafts to call, improve feeder airports for DC-3 type planes and develop essential navigational facilities.

18. The program addresses itself to the improvement of the Manila International Airport and those at Laoag in Ilocos Norte, San Fernando in La Union, Baguio City, Iloilo City, Bacolod City, Puerto Princesa in Palawan, Cagayan de Oro City, Davao City, Tuguegarao in Cagayan, New Roxas in Capiz and Jolo in Zulu.

19. On the otherhand, the development of power and water resources is as vital as the development of the transportation

network to the agro-industrial growth. And to the extent possible, maximum utilization of the potential of river basins will be pursued. This is best reflected in the on-going Angat Multi-purpose Project and in the proposedUpper Pampanga River Project scheduled for initial implementation in the first half of the program period.

20. Glaringly, the demand for electric power has increased. Electric consumption since 1954 increased by 282% as compared to an aggregate population growth of 32%.

21. A survey of the total hydroelectric capacity of the country lists a potential of 2,700,000 kw. Installed capacity as of 1965 totals 291,060 Kw.

22. Out of 1,371 cities, towns and municipal districts, only 577 of these instrumentalities are with electric service and only 265 towns have round-the-clock electricity.

23. The power expansion program concentrates on the completion of the Angat Multi-purpose and the Maria Cristina Unit No. 3 Projects and on the construction of the Bataan Thermal Plant, the Maria Cristina Unit Nos. 4 and 5 and the Agus II units which, when completed, will provide an additional capacity of 493 Kw.

24. Because of the recurring shortages in the supply of staple crops, the irrigation aspect of water resources development acquires prominence. Basic biologicql processes in the rice plant necessitate adequate supply of water - the effects of improved seeds, fertilizers and improved farm practices

would be minimal without sufficient water supply.

25. The country's present irrigation facilities are far short of existing needs. Of about 6,700,00 hectares now under cultivation, at least 1,700,000 hectares are prime ricelands of which about half is under irrigation. Serving the other half with irrigation water would entail an expenditure of over ₱600 million.

26. Of a total of approximately 330,000 hectares in the national gravity system, only about 240,000 hectares are actually irrigated, which indicates clearly the need for rehabilitation to derive macimum benefits from the existing facilities.

27. Irrigation practicesin the country are largely on run-of-the river basis, i.e., water supply solely depends on actual river flow. During the rainy season, the facilities guarantee supply of water in adequate quantities over the entire area encompassed by the system and during the dry season, because of the marked decreased in the river flow, only about 30% of the designed potentials is served with water. This accentuates the need for multi-purpose development of river basins.

28. The objectives of the irrigation program are therefore self-presenting. There will be a crash program to rehabilitate all the existing facilities and to complete all on-going projects. New projects will be constructed and heavier investment on multi-purpose projects (the Upper Pampanga River Project

with 80,000 hectares of irrigable area under perrenial supply of water) will be made. Communal and pump irrigation projects will be undertaken in support of, and not in conflict wit programmed national gravity systems. Anticipated coverage w be 380,000 hectares.

29. Major projects are hereunder listed:

A. Rehabilitation:

	Name of System	Irrigable Area (ha
1.	Tagudin, Sta. Lucia - Candon, Sta. Maria - Burgos & Amburayan RIA	7,505
2.	Agno RIS	13,296
3.	Camiling RIS	8,228
4.	Tarlac RIS	8,698
5.	Magat RIS	19,235
6.	Angat and Maasin	28,550
7.	Talavera and San Angustia RIS	10,136
8.	Penaranda	17,511
9.	Pampanga, Vaca & Lower Talavera RIS	20,674
10.	Aganan and Sta. Barbara RIS	9,790
11.	Jalaur and Suague RIS	10,181
		153,804

B. Completion

1.	Angat Multi-purpose Project	21,000
2.	Abulog RIP	12,000
3.	Ambayacan RIP	8,000
4.	Pampanga-Bongabon Ext.	8,000
		49,000

5.	Aklan RIP	5,600
6.	Bago RIP	18,000
7.	Hilabangan RIP	5,800
8.	Kabacan RIP	4,300
C.	New Construction	33,700
1.	Magat (East) RIP, Isabela	12,000
2.	Marending RIP, Lanao Del Norte	5,200
3.	Salug RIP, Zamboanga de Norte	4,300
4.	Biro RIP, Leyte del Norte	4,800
5.	Magat (West) RIP, Isabela	5,600
6.	Rugnan RIP, Lanao del Sur	4,700
7.	Cabatangan RIP, Quezon	6,400
8.	Depalo Vinay RIP, Pangasinan	4,000
9.	Baco RIP, Mindoro Or.	8,000
10.	Kenale RIP, Albay	3,600

30. One grave responsibility of the government is to provide a permanent solution to the recurring flood problems in the different regions all over the country. Economic losses suffered due to floods are difficult to measure but conservative estimates place the annual average at ₱ 40 Million.

31. Comprehensive flood control schemes are an important component of a unified water development plan and preparatory work will continue to be undertaken. Pending the completion of the water resource survey and the formulation of a complete engineering and financing scheme, flood control measures will meanwhile be limited to temporary or interim remedial projects, urgently necessary to meet presetn and immediate danger to property and population. Maintenance of existing facilities and continued dredging of rivers and esteros will be pursued.

32. Ironically, while the country continues to be plagued with intermittent over supply of water, it has to cope with the problem of regulating and supplying water in potable form to the population. Only about 48% of the population is being served with water through exiqting waterworks, artesian wells and developed natural springs. Population grows at an annual average of one million, creating a yearly investment requirement of ₱ 50 Million which must be over and above the backlog of supplying potable water to about 15 Million people estimated to cost ₱750 Million.

33. The water supply program envisions to extend services to a larger segment of the population and to improve present facilities. Over the program period, services will be extended

to an additional 6,000,000 people through eight hundred waterworks systems and four thousand artesian wells and spring development projects.

34. Efforts will be concentrated on the completion of the Manila and Suburbs Interim Project by the second year and the development of Metropolitan Systems at Baguio, Iloilo and Davao, among others, will be undertaken.

35. Side by side with the development of power and water resources and of the transportation system is a building construction program. The need for National buildings, hospitals and sanitaria becomes more acute each year.

36. Realizing, however, the limitation in resources, broad programs covering the immediate transfer of government offices to the Capitol Site, the construction of hospitals at all provinces and cities and the provision of mass low-cost houding facilities will be undertaken with reserve.

37. In view of the pronounced need for school buildings, an accelerated program of school construction will be undertaken which envisions to produce, in the course of four years, at least 40,000 schoolrooms.

38. Summarizing, the public works program aims to achieve the following major objectives:

a. Provide a safe and sufficient network of major thorough fares and integrating developmental roads, ports and harbors, and airports to facilitate the marketing and distribution of agricultural and industrial products;

b. Improve and expand irrigation facilities to help attain self-sufficiency of staple crops;

c. Provide adequate, reliable and cheap power and water supply to meet the immediate needs of industry and population; and

d. Provide an adequate physical plant for the regular social services of governmentl.

39. In terms of physical objectives, this program is expected to result, at the end of four years, in the production of the following facilities:

40. Highways. Two thousand three hundred fifty kilometers of roads will be paved with portland cement concrete; 2,000 kilometers will be asphalt-paved 900 kilometers of developmental roads and 3,000 kilometers of feeder roads will be constructed; and 30,000 lineal meters of temporary bridges will be replaced with permanent structures. In addition, several large projects will be completed, among them the Manila North Diversion and South Diversion Roads, Epifanio de los Santos Avenue and the Guadalupe and Nagtahan Bridges in greater Manila; the major bridges along the Manila North Road in Ilocos provinces; and the Opon bridge across the Cebu-Mactan channels. Within the program period, construction equipment will be procured through Reparations Payments from Japan to augment considerably the present building capacity of the Department of Public Works and Communications.

41. Portworks. For national ports, 104 additional foreign and domestic berthing facilites will be provided; 871 hectares of

port area will be reclaimed; and 140,730 square meters of transmit sheds will be constructed. 233 municipal port facilities and 4,120 lineal meters of seawalls will be provided.

42. Airports and Airways. Forty four runways of 7 trunkline, 23 secondary and 14 feeder airports will be either extended or improved; 41 taxiways and 44 terminal aprons will be constructed. Terminal buildings in 6 trunklines, 14 secondary and 5 feeder airports will be erected. Four new feeder airports will be opened. One hundred eighty one air navigation facilities will be installed or rehabilitated.

43. Railroad. The existing facilities of the Philippine National Railways will be modernized. This will include improvement in the quality of rolling stocks and ways, repair shops, signal and telecommunication system. The Sorsogon and Cagayan Railway Extension Projects will be undertaken.

44. Telecommunications. A national network linking Manila with other cities and provincial capital accomodating between 12 and 16 radio-telecommunication channels will be completed. A Mindanao netwook inter-connecting 19 cities and major towns will be developed, and linked to the national system. Telephone service will be provided to an additional 21,000 subscribers in Manila and suburbs.

45. Power. A total additional capacity of 268,000 kilowatts will be developed through the completion of 2 ongoing projects - Angat and Maria Cristina Unit 3. Four other projects - Bataan Thermal Plant, Maria Cristina Units 4 and 5 and Agus II Units will be installed and completed which will generate 225,000 kilowatts.

46. Water Supply. The Manila and Suburbs Waterworks System Interim Project to provide 320 million gallons per day serving 3.8 million people, or an additional population 800,000 will be completed. Eight hundred three provincial waterworks systems to serve 4.6 million people, will either be constructed or improved. Four thousand artesian wells and 1,200 springs will be developed in the rural areas with a client-population of 1.6 million.

47. Irrigation. Seventy-nine existing national irrigation systems will be rehabilitated; and 52 new ones will be constructed. Two hundred fifty-nine communal systems will be constructed. All these will provide an additional 281,497 hectares of irrigated land. Four thousand six hundred ninety-nine irrigation pumps will be installed to serve an additional area of 102,000 hectares.

48. River Control. Twelve regional and 56 local river control projects will be undertaken involving the construction of 237 kilometers of earth dikes, along with 6,100 meters of revetments, and 400 meters of drainage mains and the dredging of 33 million cubic meters of silt.

49. Buildings. Work on 30 national buildings and tenement housing projects involving a total floor area of 216,700 square meters will be undertaken. Twnty-seven hospitals and sanitaria will be constructed or improved, involving a total floor area of 151,200 square meters. Forty thousand shcoolrooms will be constructed.

50. The total programmed expenditures for public works are summarized in the following table.

Public Works Investment Program
Fiscal Years 1967-1970
(Million Pesos)

		FY 1967	FY 1968	FY 1969	FY 1970	Total
1.	Highways	128.4	331.0	228.5	272.5	960.4
2.	Portworks	21.0	29.4	34.0	35.0	119.4
3.	Airports	13.1	17.9	28.0	33.0	92.0
4.	Air Navigation	3.1	13.1	13.1	13.2	42.5
5.	Railroad	10.0	40.0	60.0	80.0	190.0
6.	Telecommunications	21.8	24.8	38.1	38.5	123.2
7.	Power Development	95.3	97.8	69.5	22.5	285.1
8.	Rural Electrification	5.0	8.0	10.0	12.0	35.0
9.	Waterworks	149.7	77.0	35.0	37.5	299.2
10.	Artesian Wells	7.1	7.1	7.1	7.1	28.4
11.	Irrigation	67.5	78.2	74.4	73.5	293.6
12.	River Control	10.0	12.0	17.0	21.0	60.0
13.	National Bldgs.	13.0	15.3	16.2	14.0	58.5
14.	Hospital and Sanitarium	6.9	8.3	14.4	15.7	45.3
15.	Shore Protection	1.0	1.0	1.0	1.0	4.0
16.	School Buildings	29.1	50.0	50.0	50.0	179.1
17.	Community Development Projects	35.0	35.0	35.0	35.0	140.0
18.	Preliminary Engineering	2.0	4.0	4.0	4.0	14.0
	Total Public Works Expenditures	658.8	870.4	765.5	797.8	3,091.5

Social Development

51. In the next four years the government will invest more than ₱4 billion, or about 30 per cent of its total expenditures, in the development of the social infrastructure. The bulk of these investments totalling approximately ₱3.5 billion will be devoted to the maintenance of the public school system. This amount represents about 83 per cent of total expenditures for social development. Public health facilities will likewise be expanded to meet at least the population's minimum requirements for preventive and curative services. About thirteen percent of all expenditures for social services is earmarked for this purpose. In anticipation of land reform and other rural reform measures, about ₱70 million are allocated by this program for the intensification of community development activities.

52. Allocations for labor and welfare functions are relatively modest mainly because of the specialized nature of these activities. These appropriations, however, will increase by about fifty percent between 1967 and 1970 in response to changes in operational emphasis which shall be introduced to facilitate economic growth. The share of housing in this program of expenditures represents direct government contributions. It is exclusive of other funds expected from borrowings and lending operations of government and housing institutions.

53. This program is expected to achieve the following results:

54. Education - More than 18,000 extension classes will be

provided to accommodate all children of school age, including the backlog of previous years, applying for admission in public elementary schools. Provision has also been made for the adjustment of oversized classes and the improvement of teacher-class ratios to raise the quality of instruction in public schools. The ₱50 million-a-year school construction program will make 40,000 classrooms available by 1970. These will accommodate all new enrollment and reduce the classroom backlog by more than 20,000 units.

55. Included in this program is the commensurate expansion of general and vocational secondary schools, state colleges and universities, and the establishment of new institutes as well as the implementation of foreign-assisted training projects requiring counterpart fundidng.

56. Health - Improvement in public health services will consist mainly of expanding the capabilities of preventive and curative facilities represented by health units and hospitals. There are about 1,330 rural units which have been created out of 1,745 units authorized by law. Only 330 of these units are fully staffed and equipped. By 1970 all of the 1,745 rural health units will be fully operational.

57. The ₱56-million capital expenditure program for health services included in this plan is intended primarily for the expansion of existing and construction of new hospitals. Fully implemented, this investment program will provide about 1,822 hospital beds by 1970.

These additional beds will further improve the general hospital bed to population ratio from 1:4700 in 1965 to 1:4120 in 1970. The desirable standard is 1:2500. Adequate funds are provided in the operating budget of the Department of Health to meet operating costs of these expansion program. A small but adequate portion of these expenditures for health will be devoted to expanding ancillary laboratory and research facilities.

58. Counterpart fund requirements of foreign-assisted projects, such as malaria eradication, have also been taken into account to avoid expensive interruptions previously experienced by these projects.

59. Labor.- The objective of the labor program is the introduction of new functions consistent with the requirements of a developing industrial sector while maintaining traditional enforcement conciliatory services. Thus, the larger proportion of increments allocated to the labor budget will be spent in the creation of five additional employment offices in key labor market areas over a period of four years. Training activities of Department of Labor currently limited to apprenticeship will be extended to other forms of providing skilled workers and technicians badly needed by the economy. A Manpower Development Council will be created to coordinate these activities with those of other agencies.

60. Social Welfare - The activities of social welfare agencies will be shifted from relief to preventive services. The four-year welfare program lays emphasis on community, child and youth services which have assumed new proportions in the light of the rapid growth of urban centers and a rising tide of criminally caused by

various social factors. Included in this program is the decentralization of welfare services as opposed to their present concentration in Manila.

61. Community Development - The recent resurgence of the communist movement particularly in Central Luzon highlights the need for implementing immediate reforms in rural areas of the country. The community development approach has proven its effectiveness in carrying out these reforms particularly at the grassroots level. Included therefore in this plan is an extensive community development program which is expected to reach about two thousand barrios a year over a period of four years. Community development activities will range from the utilization of idle out-of-school youth to the construction of self-help projects such as school buildings and communal irrigation systems. These activities will be undertaken in coordination with government and private volunteer agencies engaged in related services. Adequate funds have been allocated in this plan to meet both operational and counterpart requirements of this community development program.

62. Science and Technology - are inherent to the development progress. Accordingly, envisioned in this plan is a four-year program of applied research and development studies involving agriculture, industry and engineering, medicine and nutrition, the application of atomic energy, and the development of scientific manpower. Earmarked for this program is the amount of ₱57.8 million for operating expenses, surveys, research and training grants, the dissemination of re-

sults of scientific studies and to support funding requirements of foreign-assisted projects.

63. A summary of the program for financing public works and social development is contained in Chapter V of this report.

III INDUSTRIAL DEVELOPMENT PROGRAM

1. Mining and manufacturing, classified together as Industry, form the most productive and the costliest sector of the Plan. Over the four-year plan period, Industry will produce almost one-third of the increase in national income and absorb about a quarter of total gross domestic investment.

2. The government itself will undertake very little of this investment; but it will provide massive support for those private projects that seek either to expand existing capacity or to undertake new development along the desired industrial lines. This support will take the form not only of the normal tax and tariff incentives, but also of the backing of hard cash. For projects in the fifteen industry lines of highest priority alone, the government is prepared to involve itself to the extent of almost ₱ 1 billion, in equity participation, direct long-term lending, or guarantees of foreign loans. This amount is close to a third of the total investment expected for Industry.

3. The high-priority projects which will be described in more detail below, are all in primary or intermediate industry lines. The choice of priorities reflects not only the new conditions under which Philippine industries now operate, but also the maturity that Philippine manufacturing has reached, together with its attendant problems.

Background and Problems

4. Manufacturing in the Philippines began with, and is still

heavily dominated by, light finishing operations. This was partly because in the decade of the 1950's, from which time serious government support of industry may be dated, the domestic market was too small to absorb, and local capital too scarce to sustain, heavy manufacturing operations. A more important reason was the type of support given by government, which was characterized by preferences in the allocation of cheap foreign exchange, substantial tax exemptions, and heavy tariff protection. The result was that manufacturing output grew rapidly; but it concentrated on the finishing end of operations, and depended heavily on imports of capital goods and raw materials.

5. Even before exchange controls were totally removed in 1962, it had become apparent that the impetus given to manufacturing by the early policies had begun to run down. The growth of manufacturing slowed in 1958-61, partly as a result of the fact that some of the markets created by restrictions on imports had become saturated. Manufacturers began to turn toward intermediate products. Capital needs thus became greater; and, since most capital goods still had to be imported, costs rose still higher when the free market exchange rate for the dollar was established at almost twice the former official rate. Finally, government concern with rising prices led to conservative credit policy in the years after exchange decontrol, making it difficult for some manufacturers to obtain financing precisely at the time their financial needs were urgent.

Objectives and Basic Policies

6. The industrial program has three main objectives: (a) to hasten the change in the composition of manufacturing output toward basic and intermediate products, by providing long-term financial support to projects in the desired industry lines; (b) to alleviate the temporary credit shortages of industries which are essentially viable; and (3) to create further employment opportunities in industry by means of a cottage industries program. The fulfillment of these objectives is expected to result in an annual growth rate of 8.4 per cent in industrial output.

7. Two important factors help to assure the success of this ambitious program. The first is that a substantial manufacturing sector already exists in the Philippines, large enough to have developed over-capacities in some sectors, and large enough in general to assure economic markets for the intermediate products which this program encourages. The second advantage is that the government has a powerful instrument to direct investment into the desired industry lines, in that it controls a substantial portion of the long-term credit available to industry. This control arises from the large resources of government financial institutions which engage in capital transfers to the private sector, as well as from the government's ability to secure and guarantee foreign loans.

Priority Industrial Projects

8. The projects listed in this sections have been chosen by

the following criteria: (a) support of the agriculture and public works programs (e.g. the manufacture of cement for roads and irrigation projects), (b) provision of producer goods for further domestic processing; (c) further processing of export products is traditionally sold in primary form; and (d) generation of employment opportunities.

9. The fifteen projects of highest priority require a total investment including pre-operating expenses and working capital of about ₱1.3 billion, of which some $189 million will be in foreign exchange. In addition, 22 other projects of lesser priority will require an additional investment of ₱350 million.

10. The projects of highest priority are summarized in tables 1 and 2 following. Each project is described briefly below.

Table 1

PRIORITY INDUSTRIAL PROJECTS FOR INDUSTRIAL DEVELOPMENT PROGRAM

Project Category	Number of Plant(s) or Expansion	Aggregate Annual Capacity	Estimated Cost of Project** (Million) Pesos	Dollars	Total In Pesos
A. High Priority Projects					
1. Integrated Wood Processing	4	270 million sq. ft.	₱18.8	$5.3	₱39.5
2. Integrated Pulp & Paper	2	152,670 MT. (paper)	202.7	45.0	378.2
3. Industrial Salt	1*	50,000 MT	3.6	0.5	5.6
4. Soda Ash	1	60,000 MT	6.0	3.2	18.3

Project Category	Number of Plant (s) or Expansion	Aggregate Annual Capacity	Estimated Cost of Project** (Million)		
			Pesos	Dollars	Total In Pesos
5. Fertilizer	1*	65,000 MT. Urea or 100,000 MT. $(NH_4)_2SO_4$	42.0	$7.5	71.4
6. Polyethelene	1	3,000 MT.	2.6	1.6	8.9
7. Anti-Biotics	1	11,020 M. Grains	6.3	3.8	21.2
8. Cement	7*	72 Million Bags	147.1	52.0	349.9
9. Refractories	1	30,000 MT.	5.8	1.8	12.7
10. Coke Plant	2	320,000 MT.	32.3	11.2	76.0
11. Surigao Laterite	1	6,500 MT. Ni, & 250,000 MT. Steel	35.0	36.2	176.7
12. Copper	1	17,000 MT.	40.0	12.0	86.8
13. Ferro-Alloys	Exp.	10,000 MT.	3.8	1.1	7.9
14. Agricultural Machinery	4	(Various items)	20.0	7.0	47.3
15. Ship Building	Exp.	1 Ship of 1,700 GT.	45.0	1.0	49.7
	Sub-Total		611.0	189.2	1,348.9
B. Other Priority Projects					
Total requirements of 22 other projects listed in table 3.					350.0
Total, 37 projects					1,698.9

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* New plants in addition to expansion of some existing projects.

** Requirements include working capital and pre-operating expenses as well as land, plant, and equipment.

Table 2
Fifteen High - Priority Projects:
Summary Of Sources And Uses of Financ
(Million Pesos)

:1.	:1. Wood Processing:	:2. Pulp & paper	:3. Industrial Salt:	:4. Soda:	:5. Fertilizer*	:6. Polyethylene:	:7. Antibiotics :	8. Cement
1. Capital Sources								
Equity: Private	16.0	102.0	2.2	7.4	28.9	3.6	8.6	106.5
Government	-	75.0	-	-	-	-	-	-
Total	16.0	177.0	2.2	7.4	28.9	3.6	8.6	106.5
Debt: Foreign	20.6	175.5	2.4	7.6	29.6	3.7	8.7	202.8
Domestic gov't.	2.8	25.0	-	2.2	8.7	1.6	-	20.0
Private	-	-	1.0	1.1	4.3	-	3.9	20.6
Total	23.4	200.5	3.4	10.9	42.6	5.3	12.6	243.4
Total Capital Sources	39.5	377.5	5.6	18.3	71.4	8.9	21.2	349.9
II. Capital Uses								
Pre-Operating	2.0	28.7	0.2	0.1	0.3		0.1	1.4
Land, Plant, Equipment	24.5	316.1	3.8	17.5	68.2	8.5	20.3	394.3
Working Capital	13.0	32.7	1.6	0.7	2.9	0.4	0.8	14.2
Total	39.5	377.5	5.6	13.3	71.4	8.9	21.2	349.9
III. Phasing of Financing								
FY 1967	9.9	267.6	2.8	9.1	-	4.5	10.6	213.0
FY 1968	14.8	22.3	1.4	4.6	-	2.2	5.3	75.7
FY 1969	9.9	50.7	1.4	4.6	35.7	2.2	5.3	61.1
FY 1970	4.9	36.9	-	-	17.9	-	-	-
Total	39.5	377.5	5.6	18.3	71.4*	8.9	21.2	349.9

* Urea project, includes ₱17.9 million programmed, for FY 1971.
** Includes ₱2.0 million programmed for FY 1966
+ Less than ₱0.05 million
NOTE. Details may not add up to totals owing to rounding.

	9. Refractories	10. Coke**	11. Laterite Smelting	12. Copper Smelting	13. Ferro-Alloys	14. Agricultural Machinery	15. Ship Building	Total 15 Projects
I. Capital Sources								
Equity: Private	5.1	18.5	36.0	22.0	3.6	19.2	19.9	399.5
Government	-	-	-	-	-	-	-	75.0
Total	5.1	18.5	36.0	22.0	3.6	19.2	19.9	474.5
Debt: Foreign	6.9	42.1	126.7	46.8	4.3	27.3	4.7	709.7
Domestic Gov't.	0.7	15.4	14.0	18.0	-	0.4	25.1	133.9
Private	-	-	-	-	-	0.4	-	31.3
Total	7.6	57.5	140.7	64.8	4.3	28.1	29.8	874.9
Total Capital Sources	12.7	76.0	176.7	86.8	7.9	47.3	49.7	1,349.4
II. Capital Uses								
Pre-Operating	0.5	2.0	3.0	2.0	0.2	0.5	0.5	41.5
Land, Plant, Equipment	10.2	63.0	153.7	71.2	6.7	44.8	43.1	1,245.9
Working Capital	2.0	11.0	20.0	13.6	1.0	2.0	5.5	121.4
Total	12.7	76.0	176.7	86.8	7.9	47.3	49.7	1,349.4
III. Phasing of Financing								
FY 1967	2.6	16.0	35.5	26.6	1.3	12.8	14.4	626.7*
FY 1968	5.7	25.4	72.6	30.6	4.4	12.8	9.1	286.9
FY 1969	4.4	25.4	68.6	29.6	2.1	10.8	13.1	324.9
FY 1970	-	7.2	-	-	-	10.8	13.1	90.8
Total	12.7	76.0**	176.7	86.8	7.9	47.3	49.7	1,349.4

11. Plywood and Veneer. There are four plywood and veneer projects proposed for establishment. They will produce veneer sheets and plywood panels at a total rated capacity of 900,000 square feet per day. The plywood will be used in the manufacture of wooden furniture, cabinets, truck bodies, and containers and as construction material. The proposed plants will require 169 million board feet of logs annually. The total capital investment for the projects is about ₱39.5 million, of which 20.6 million (or 5.3 million) will be in dollars. Government participation will amount to about ₱23.4 million. Two of the plants will be located in Mindanao and the other two in Luzon.

12. Pulp and Paper Mills. There are two integrated pulp and paper mills proposed for establishment to produce the following:

(a) Newsprint for the printing industry;

(b) High grade printing paper and bond;

(c) Kraft paper consisting of corrugating medium and linerboard for the manufacture of paperboard products, and high grade kraft paper for the paper bag industry; and

(d) Bleached kraft pulp for use of the non-integrated paper mills.

The two mills will have a combined annual production of 152,670 metric tons for the three major paper products and 167,000 metric tons for mechanical and chemical pulp. The pulp production will be processed by the same mills into final products, except for about 11,360 metric tons of bleached kraft pulp (chemical) which will be sold unprocessed to other local paper mills.

13. The principal raw material to be used is pulpwood, of the broadleaf and needleleaf species which are abundant in the Philippine forests. Two two proposed mills will have their own forest concessions which will serve as source of the pulpwood. One will also tap for raw material supply the pulpwood waste coming from its logging operations and that from a sister company engaged in logging, sawmilling and veneer operations. Of the total capital requirement of ₱378.2 million, up to 275.5 million will be government support.

14. Industrial Salt. The intention of this project is to increase the annual capacity of the two major existing industrial salt producers by some 30,000 metric tons, and to help the establishment of a third firm, which will produce an additional 20,000 metric tons. The result will be to almost double the present industry capacity of 60,000 metric tons. Of the total investment requirement of ₱5.6 million, about ₱3.4 million will be government supported.

15. Soda Ash. Used mainly by the glass industry, is still not produced domestically; importation has been increasing by almost 20 per cent annually. An economic-sized plant, with an annual capacity of 60,000 metric tons, is projected. The government will provide about half of the total cost of ₱18.3 million.

16. Fertilizer. The program proposes the establishment of an ammonium sulphate plant of 100,000 metric tons/year capacity, or a urea plant of 65,000 metric tons/year, by 1969. The products

will be fertilizers needed by the agriculture sector, manufactured from raw materials which are locally available, i.e., ammonia and carbon dioxide synthesized from naptha produced by refineries, and sulphuric acid which could be produced from local pyrite concentrates. The technology is already being employed by existing fertilizer firms and will be no problem.

17. Polyethlene. Is the fastest-growing polymer currently produced. Its major uses at present are as packaging films, containers, molded articles, electrical insulation, wire coating, and pipe. The basic material in the production of polyethylene is ethylene which is derived from the cracking of aliphatic hydrocarbons found in petroleum. The monomer is produced in smaller volumes by the catalytic dehydration of ethanol (ethylalcohol).

18. The ideal location for a polyethylene plant would be in the vicinity of the material sources (refineries and alcohol producers) and the users of the product, i.e., the Greater Manila Area. The plant rated capacity, considering the local demand, should be 3,000 metric tons annually, which size will require a capital outlay of ₱8.[illegible] million.

19. Antibiotics. The program proposes the establishment of a basic manufacturing plant for antibiotics, which are used in the treatment of various diseases, and imports of which, are rising rapidly.

20. The raw materials used in the manufacture of commercial antibiotics are streptomycin and mold microorganisms which have to

be imported, and corn steep liquor, lactose and other materials rich in protein such as meat extracts, fish meal and soybean meal which are locally abundant. All these materials are subjected to a process of fermentation in order to derive the compounds of antibiotics.

21. The plant site should be market-oriented or close to centers of population. A site within the greater Manila area would be desirable.

22. The total project requirement for a plant with an annual capacity of 11,020 million grains would entail some ₱21.2 million. The project cost could be put up by the project proponents from the private sector.

23. Cement. A major material for infrastructure projects, also has great export potential in Asia. An additional capacity of 72 million bags of cement is proposed to be created during FY 1967-1970. This increase will come from the expansion of six existing plants by 35.6 million bags and the establishment of seven new plants with a total capacity of 36.4 million bags. The total capital requirement will amount or ₱349.9 million, of which the dollar portion will be about $52 million. The domestic mineral resources can supply the raw material needs of industry for hundreds of years.

24. Refractories are materials used for constructing different types of industrial furnaces, fire boxes and apparatus operated at high temperatures. The major consumers of refractory products in the Philippines are the iron and steel industry, foundries, cement plants, glass plants and the non-ferrous industry.

25. There are at present only two firms engaged in the manufacture of refractory materials in the Philippines whose local production is nil compared to the demand. Furthermore, with the expected increase in operating cement plants from 8 to 14 in the next two years, refractory consumption is bound to be further accelerated.

26. It is proposed to set up a refractory plant in Iligan City with an annual capacity of 30,000 metric tons annually. The total project cost is ₱12.7 million, of which the dollar portion is $1.8 million.

27. Coke. Both present and projected demand of our metal industry warrant the setting up of plants for the production of foundry coke and semi-coke, both of which are presently imported in large quantities.

28. CEPOC Industries, Inc. a government-owned corporation and owner of the Malangas Coal Mines has proposed the establishment of a foundry coke plant which has been approved by the Office of the Economic Coordination (OEC). The proposed plant will be located at Malangas, Zamboanga del Sur at the vicinity of the Malangas Coal deposits, primary source of raw material. It will be equipped with beehive ovens designed to produced 60 metric tons of coke per day or 20,000 metric tons annually, using approximately 45,000 metric tons of coal.

29. The project will be financed by the proceeds of the bond issues appropriated for CEPOC under R.A. 1341. The total estimated capital outlay is ₱3.5 million. It will require a dollar allocation

equivalent to ₱0.4Million.

30. Semi-coke is not locally produced at present due to the absence of a market. The development of the metals industry, however, will provide potential demand for this product in the next three to four years. The Iligan Integrated Steel Mill (IISMI) and the proposed laterite smelting plant alone are expected to consume 330,000 metric tons of coke at full operation.

31. One coke plant of 300,000 metric tons annual capacity will be sufficient to meet demand. The plant is proposed to be allocated at Iligan City since the greater bulk of potential consumers will be in that area. The plant will need about 500,000 metric tons of coal annually.

32. The estimated capital outlay for the project is 76.0 million with a dollar allocation of $10.8 million.

33. Laterite. The Philippines among the few countries endowed with substantial deposits of laterite ore, for which there is a large world demand. However, the complexities of laterite processing technology and the capital-intensive nature of possible exploitation schemes have delayed the development of this reserve. The Le Nickel Company of France (which developed the New Caledonian laterite reservation and which is considered an authority on laterite processing) has recently proposed in collaboration with a Philippine group to develop the Surigao reserve. This would mean an annual production of 6,500 metric tons of ferro-nickel which would be readily consumed by the world market, and 250,000 metric

tons of steel billets which would be sufficient for the country's projected requirements. The project calls for a total capital outlay of ₱176.7 million, of which ₱145 million must be spent for imported equpment.

34. Copper Smelting. The project proposes the establishment of one integrated copper smelter plant with an aggregate capacity of 17,000 metric tons of copper products per year. Wire rods for copper wire manufacturers will be the main product, to be complemented by sheet bars and copper ingots which foundries need for casting plumbing fixtures, machinery parts, etc. Gold, silver and sulfuric acid will be produced as by-product. Raw material and energy requirements of the proposed plant are locally abundant. The Marinduque Mining and Industrial Corporation, one of the largest local copper mining firms, which currently exports copper concentrate to Japan, has proposed the establishment of the copper plant at Dulungan, Negros Occidental. The total capital outlay is estimated at ₱86.8 million.

35. Ferro-Alloys are alloys of iron and other elements such as silicon and manganese, which are added to steel or cast iron to produce certain properties not obtainable from the pure element alone for practical or economical reasons. Maria Cristina Chemicals has a plant in Iligan, Lanac del Norte, which is producing only 2,800 metric tons of ferro-alloys annually due to its concentration on calcium carbide. The plant facilities are now being planned to be expanded to a capacity of 10,000 metric tons of ferro-alloys which is

foreseen as the country's requirement by 1970. The cost will be about ₱7.9 million.

36. Agricultural Machinery. There are about 30 companies engaged in distribution of agricultural machinery and implements. Of this number there are six firms manufacturing components of agricultural machinery and seven fairly large plants assembling farm tractors from imported knockdown parts. One local dealer plans to manufacture power tillers, including diesel engines of 4.5 to 12 HP, as a joint venture with a foreign maker. This project is planned to be put up in the Greater Manila area for proximity to distributors. It will entail an investment of over ₱10 million from the local partner and about $5 million from foreign counterpart. Other entities, such as NASSCO and private proponents, have plans to manufacture agricultural machinery and implements with estimated outlays of ₱2.5 million a year for four years, and dollar investments of about $2 million. The aggregate capital requirements of these ventures is ₱47.3 million.

37. Ship Building. The project proposes the establishment of additional capacity in shipbuilding to help relieve the shortage of bottoms for passenger and cargo transportation. The project is the expansion program of NASSCO whose shipyards at Mariveles, Bataan need to be augmented in order to increase shipbuilding capacity. NASSCO proposes to build one ship annually for the next two years, and three ships for the succeeding two years, or a total of five

ships in four years. The bottoms will be of 1700 gross tons class.

38. Expansion requirements of NASSCO are distributed as follows: ₱7.5 million for each ship, ₱3 million for operating capital, ₱0.5 million for the pier, breakwater, and fitting area, and ₱4 million for other expenses and contingencies. The aggregate outlay is $1.2 million in dollars and ₱45 million in local currency.

39. Other Projects. In addition to the 15 projects just described, 22 projects are deemed worthy of special support. They are listed in Table 3 below.

Table 3

List Of Additional Industrial Projects

	Projects	Rated Capacity Per Year	Total Investment Requirements (In Millions)
1.	Aluminum	20,000 MT	₱ 109
2.	Zinc Smelting	22,000 MT	40
3.	Gold Refining	400,000 OZ	7
4.	Industrial Explosives	3,000 MT	6
5.	Photographic Paper	580 MT	4
6.	Hydrogen Peroxide	1,700 MT	10
7.	Coal Tar Dyes	1,000 MT	5
8.	Zinc Oxide	1,200 MT	2
9.	Coco-Chemicals	6,000 MT	10
10.	Benzene Hexachloride	2,000 MT	4

	Projects	Rated Capacity Per Year	Total Investment Requirements (In Millions)
11.	Synthetic Rubber	8,500 MT	23
12.	Coconut Oil	160,000 MT	17
13.	Animal Feeds	50,000 MT	3
14.	Dessicated Coconut	10,000 MT	5
15.	Edible Oil	20,000 MT	10
16.	Ice	2,000 MT	6
17.	Ceramic Tiles and Fitting	195 million pcs.	16
18.	Optical Glass	500,000 pairs	2
19.	Glass table wares and containers	46,000 MT	37
20.	Flat Glass	5,000 MT	3
21.	Logging Equipment	53 million bd. ft.	11
22.	Shipping Bottoms	30,000 Tons	20
	Total 22 projects		₱350.0

Cottage Industries And Refinancing

40. The industrial program intends to promote the development of small-scale and cottage industries by increasing the availability of government services and credit. In addition to the ₱92.5 million investment in small industries expected from private sources during the program period, the government has programmed an

outlay of ₱112.8 million. The latter amount is to cover the operations of the National Cottage Industries Development Authority. The anticipated private investment includes capital transfers from government financial institutions.

41. Finally, about ₱800 million is expected to be made available from government financial institutions for the refinancing of distressed industries.

IV AGRICULTURAL DEVELOPMENT PROGRAM

1. Agriculture, including forestry and fishing, continues to be of prime importance in Philippine economic development, for several reasons: (a) population is rising at a rapid rate, and maintenance of present welfare levels, let alone their improvement, requires steep increases in food production; (b) agriculture continues to be our main dollar earner and a large source of capital formation; (c) agriculture is the basic source for industrial raw materials and a fertile ground for import substitution; and (d) employment and welfare levels are most depressed and thus government action is most necessary in the agricultural sector.

2. Unfortunately, agricultural production has generally been as backward as it is important. The cultivation and processing of such leading foreign exchange earners as sugar and copra, have long been carried on with efficient and modern methods. But the cultivation of food crops is still characterized by crude tilling of minuscule plots. The small increases in production of these crops have continued to come from increases in hectarage rather than yield; and with the present rates of expansion, cultivable land will be exhausted in about twenty years. At the same time the rising investment requirements of the industrial program require that foreign exchange used for the importation of consumers goods, especially food, be reduced. Finally, present practices of cultivation are wasteful of manpower and other economic resources; and the prevention of social unrest as well as the need to strengthen

domestic markets for manufactured goods require that farm incomes be substantially raised from their present depressed levels.

3. The agricultural resources of the Philippines are large and to a large extent remain untapped, but there are problems of conservation in certain areas. The deep fishing waters, for example, have hardly been touched; but certain coastal areas, which have been fished intensively for generations, are showing signs of depletion. A second area of concern is logging. Logs and lumber production, once extremely low, has swiftly risen to become one of the country's leading exports. The cost has been depletion of certain forest areas, and a flood control problem.

Problems And Objectives

4. The program is designed to solve the basic problems of agriculture which may be grouped under four headings: (a) improving nutritional levels for the fast-growing population; (b)improving agricultural production methods; (c) removing the social problems which are largely responsible for maintaining inefficient production methods; and (d) conservation and research problems.

5. Nutritional Levels. The present diet of the average Filipino, while barely adequate in cereals, is woefully deficient in protein. Domestic production is able to supply the average Filipino family with only two-thirds of the fish, half the eggs, one-third of the meat, and less than half a hundredth of the milk that it needs. Moreover, the population is growing at one of the fastest rates in the world; and even to maintain this meager diet already taxes the resources of Philippine agriculture. When poor weather

intervenes, food production loses the race with population: three times in the last four years, the Philippines has had to import rice. The large programmed investments in agriculture are designed not only to keep feeding the growing population, but hopefully to feed them a little better.

6. Productive Efficienty. The Philippines cannot continue such longer to increase food production merely by increasing area planted, while maintaining the present low yields. More efficient methods mubt be used. The most productive investment in this field is irrigation, and the government expects eventually to double the area under irrigation, Other programs also exist to improve distribution of fertilizer, pesticides and certified seeds, to promote the increasing use of farm machinery and to increase the availability of farm credit.

7. Social Reform. Much of the stagnation in production techniques has been the result of the old system of share tenancy, legally abolished in 1963 by the passage of the Agricultural Land Reform Code. Achievements under the Land Reform Program have so far been modest, in large part because of lack of funds with which to buy up large agricultural estates for redistribution to farmers. A project under this program proposes to remedy this deficiency.

8. Conservation and Research. The capabilities of the Bureau of Forestry for protection of soil, water and forest resources are limited and sorely overtaxed; their expansion is proposed. In addition, much of the increase in the efficiency of agricultural production is expected to result from research into seed and animal varieties and improved methods of cultivation which are especially suited for Philippine conditions.

9. Most of the remainder of this chapter is devoted to descriptions of the major projects designed to solve these problems. These projects, as well as many others now underway or in the planning stage, are expected to result in the production increases given in Table 1 below:

Table 1
AGRICULTURAL PRODUCTION GOALS
FY 1967 - 1970
(In Thousand Metric Tons)

Agricultural Products	1966 (Actual)	1967	1968	1969	1970
Crops	12,406	13,898	14,591	15,361	16,151
Food crops	8,952	10,271	10.852	11,509	12,184
Commercial crops	3,454	3,626	3,739	3,852	3,966
Livestock & Poultry	326	440	469	499	531
Meat	226	320	341	363	387
Milk	8	32	34	36	39
Eggs	91	88	93	99	106
Fish	604	747	831	945	1,002
Forestry products*	3,263	3,100	2,750	2,400	2,650
Timber	2,763	2,500	2,100	1,700	1,900
Lumber	500	600	650	700	750

* In million board feet

10. The attainment of these production goals will result in the improvement of the average diet to the extent shown in the following table:

Table 2
FOOD SUFFICIENCY ESTIMATED FROM
PRODUCTION GOALS
FY 1967-70
(In Percent)

Year	Food Crops	Meat	Milk	Eggs	Fish
1966 (Estimate)	83.8	38.0	1.5	41.7	65.4
1967	85.3	39.1	1.6	42.3	70.4
1968	87.0	40.3	1.6	44.1	75.7
1969	89.2	41.4	1.7	45.3	80.4
1970	91.1	42.6	1.7	46.5	85.1

11. Twelve project groups are considered of the highest priority in the agricultural development program. Their total cost over the next four fiscal years will be ₱628.1 million. They are summarized in Table 3 below and are more fully described in the following paragraphs.

Land Reform

12. The most important of the projects in the agricultural program proper are those designed to implement land reform. These projects will not only correct an outmoded land tenure system; indications from pilot projects show that they can increase production by as much as 30 per cent.

13. The Present Situtation. About half the farms in the country are under share tenancy; in Central Luzon the proportion is about 60 per cent. The wide extent of this system has done a great deal to inhibit Agricultural productivity.

14. There are several evils inherent in this system. In relation to available land, the number of willing tenants is high, and the bargaining position of the share-tenant is weak. The tenant is also largely dependent on the landlord for financing. Although there are laws designed to protect the tenant, faulty construction and poor administration of these laws have facilitated their avoidance or outright violation by the landlord. As a result, the landlord is able to exercise over the tenant economic control that soon extend to social and political matters. Finally, the system offers no encouragement to the transfer of capital from agriculture to industry that is a requirement of the overall program.

15. The share tenancy system was officially abolished in 1963 by the passage of The Land Reform Code, which among other things reduced the rent leaseholders would have to pay to the equivalent of not more than 25 per cent of the average harvest sought to

provide the tenant with expanded sources of financing and technical and material assistance; and decreed the creation of a Land Bank to finance the changing of the land tenure system and promote the transfer of investible funds to industry.

16. Early accomplishments under the land reform program, while modest, have been extremely encouraging. Among other things at least twelve municipalities have been declared land reform areas; resettlement has been carried out on an area totalling almost half a million hectares, to the benefit of 67,000 farmers, and the production in nine land reform areas has shown an increase of over 30 per cent from the pre-land-reform period.

17. Present Program. The land reform program for the next four years covers three types of operations: leasehold, land resettlement and improvement, and provision of supporting credit financing concerned with land reform are expected to total ₱936 million over the program period. This amount includes, however, current operating expenditures and expenditures on other fields than land reform.

16. Leasehold and Land Improvement. The Land Authority estimates its capital expenditures for leasehold and land improvement to aggregate ₱141.4 million during the program period. The main objective is to convert all share-tenants in rice farms into leaseholders. There are at present 417,000 of these, working almost a million hectares. The goal is to convert 75 per cent into leaseholders by the end of fiscal 1970.

19. The capital program includes outlays in various projects to support these goals. For land development and improvement, some ₱44 million is programmed, other capital outlays include: home development projects, ₱19.5 million; land survey and subdivision, ₱12.0 million; swamp reclamation, ₱11.3 million.

20. Land Redistribution. The Land Bank plans an ambitions program to acquire 191,000 hectares of large estates for redistribution, in economic-size holdings, to 64,000 leaseholders. The land redistribution program will require eight years and cost a total of ₱767.8 million. On the first four years, 91,000 hectares will be redistributed and the cost will be ₱367.9 million.

21. Land Bank will not require all of the large amounts mentioned above. Most of its payments for land will be in the form of bonds. For its entire investment operations over the next four years. In fact, the Land Bank requires the smaller total of ₱125.6 million. Over the eight years of its land acquisition program, the total requirement is ₱ 206.1 million.

22. Production Credit Extension. All or most of the production credits and the machinery acquisition credits in the next project will accrue to farmers in land reform areas, as a part of the land reform program. The production credit program pprpposes the expansion of production credit to 437,000 farmers presently working 931,000 hectares in thirteen priority provinces. The additional investment that these loans will make possible is expected to double rice yields in the priority areas. The expected return on the farmers new investment is over 40 per cent.

The credit facilities required amount to ₱210.6 million, of which from their own resources the implementing agencies (The Agricultural Credit Administration, the Central Bank and Rural Banks) are able to supply ₱53 million. An additional ₱157 6 million is sought from foreign loans, which the high return on investment will enable to be speedily repaid.

23. Machinery Credit Extension. The expansion of mechanized farming is presently hampered by a shortage of farm credit. Thos project proposes to provide farmers with liberal medium- and long-term credit for the purchase of such farm machniery as tractors, irrigation pumps and various farm implements. The result of mechanization is dramatic, especially in view of the extremely primitive state of most present Philippine cultivation. Costs of production can be reduced by as much as 50 per cent and man hours per unit output by 90 per cent.

24. The credits for farm machinery will be extended to farmers in eleven provinces working 146,000 hectares. Of the total requirement of ₱113.4 million, ₱57.6 million can be supplied by existing sources. The remainder will be financed by foreign loans.

Production Improvement

25. The second group of priority projects is concerned with improving agriculutral production methods. These projects reflect what is felt to be the most pressing needs of farmers, more irrigation for their lands, more efficient milling, and diversification of production.

26. Irrigation. Eighty-seven national gravity systems are proposed for either rehabilitation or completion. The result will be more than double. The area under gravity irrigation, adding another 298,000 hectares to the present 277,000 hectares. The total cost of the program will be ₱245.8 million.

27. Improvement of Rice Mills. About three quarters of the rice and corn mills presently operating in the Philippines are of the primitive and wasteful "kiskisan" type. These recover only about 45 per cent rice by volume from the grain input. New mills can improve the rate of recovery by about 20 per cent, substantially relievingthe present rice shortage. The replacement of about 4,000 mills is proposed by this project over the next four years, at a total cost of about ₱30 million.

28. Liguasan Marsh Reclamation. The remaining uncultivate area suitable for planting to rice is rapidly diminishing. The extensive Liguasan marsh in the province of Cotabato covers about 43,000 hectares and would be prime rice land if it was drained of excess water. A study to determine the feasibility of this proposal would cost about ₱3.9 million and is considered of high priority.

29. Milk Collection Centers. The female of the carabao, the common farm beast of burden, is a good milk producer, but has not been used commercially for this purpose. At the same time, the greatest deficiency in the Philippine diet is in milk. Five milk collection centers are proposed for various sectors of the country, at a total cost of ₱595,000. These will collect, store, pasteurize and distribute carabao milk.

30. Navotas Fishing Port. While Philippine coastal waters have long been intensively fished, prices of fish are high even short distances inland, and the country as a whole still imports fish in large quantities. The reason is lack of sutable port, storage and processing facilities. This project proposes to examine the feasibility of such an integraged fishing port in Navotas, which is presently the fish distribution center for Manila as well as the whole of Luzon. The cost of the study will be ₱1 million.

31. Soybean Development. Soybeans are an important industrial input for which substantial demand is foreseen over the program period. A total of ₱138,000 is needed for experimental progects which would result in commercial production by the bhird year.

Conservation

32. Forest and Watershed Protection. Wasteful logging and farming practices have caused alarming depletion of Philippine forests as well as flood problems in some areas. This project proposes the establishment of three pilot forest and watershed conservation units in areas totalling 4.4 million hectares. For this purpose, ₱1.5 million will be required for equipment, personnel and training.

Table 3
PRIORITY PROJECTS FOR AGRICULTURE DEVELOPMENT PROGRAM

		Requirements FY 1967-70 (Million pesos)
	Land Reform	
1.	Land Authority capital program	141.4
2.	Land Bank operations (Includes financing of first four years of program for acquisition of 191,000 hectares of large estate for redistribution to 64,000 leaseholders)	125.6
3.	Production credit extension to 437,000 farmers working 931,000 hectares	210.6
4.	Machinery credit extension on long term to farmers in 11 provinces	113.4
	Production Improvement	
5.	Irrigation: 87 systems, increasing irrigated area by 298,000 hectares	245.8*
6.	Replacement or reconditioning of 4,000 primitive rice mills	30.0
7.	Liguasan marsh reclamation (survey only)	3.9
8.	Milk collection centers	0.6
9.	Navotas fishing port (survey only)	1.0
10.	Soybean development program	0.1
	Conservation	
11.	Pilot forest protection program	1.5
	Total (less irrigation)	628.1

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* Incorporated in Public Works program

V. FINANCING THE DEVELOPMENT PROGRAM

1. Financing the development program will require a major effort to mobilize a greater proportion of the increases in income for investment purposes as opposed to consumption. While the Philippines has succeeded on this score in the past, at the end of the 1950's, this undertaking will be more difficult under the present context of free international transactions.

17%

2. The development program calls for an increase in the national savings rate from the current 16.0 per cent of GNP to 19 per cent by 1970. During the four-year plan period, the average savings rate will be raised to 17.8 per cent compared to 14.4 per cent in the preceding four-year period. With the projected increase in the savings rate, domestic savings will cumulate to ₱17.0 billion during the plan period as against the investment target of ₱20.3 billion.

3. To attain the investment target, therefore, net external assistance amounting to $851 million or 16.4 per cent of the total capital formation will have to be obtained to supplement domestic savings.

4. In addition, the Philippines" debt service burden during the plan period amounts to $506 million with a high degree of concentration in FY 1967 (of $174 million) on account of the short and medium term loans. After the first year, the debt service burden drops to $121 million in FY 1968 and decreases to $108 million

in FY 1969 and thence to $103 million in FY 1970. As of December 31, 1965, outstanding external obligations of both the public and private sectors amounted to $578 million, made up of short-terms loans of $118 million, medium-term loans of $229 million and long-term loans of $230 million. Since one-fourth of the $80 million obligation of the Development Bank of the Philippines is matched by special deposits with U.S. banks, the debt service burden in the real sense amounts to only $486 million during the plan period.

5. The gross capital inflow required by the country, if the external reserves are not to be depleted, thus amounts to $1,360 million over the four-year plan period. This will be partly covered by the following source of external finance other than conventional borrowings:

a. Reparations averaging $25 million annually or a total of $100 million.

b. War damage and veterans payments by the United States Government totalling $120 million.

c. Projected private long-term capital inflow aggregating $300 million, including $150 million of reinvested earning of foreign companies.

6. The program will thus require $560 million from other sources in the form of conventional borrowings abroad, U.S. government loans repayable in local currency and grants. On the assumption that the Philippines could service external debt in an amount equivalent to 11-12 per cent of current foreign exchange receipts and,

further, that the conventional borrowings will be available on a long-term basis then this volume of loans should be within the capacity of the economy to service. In 1965/66, current foreign exchange receipts amounted to $1.27 billion (not including unclassified items amounting to $196 million).

National Government

7. The Program calls for an expansion in direct investment expenditures of the National Government from ₱228 million in FY 1966 to ₱650 million in FY 1970. For the four-year plan period, total developmental outlays are projected to reach ₱3.09 billion. Against this financial requirement, government current operations, on the basis of existing tax rates, are expected to yield a surplus of ₱5.2 billion which shall be augmented by ₱126 million of reparations funds. The gap between development outlays and capital receipts amount to ₱1.9 billion ($487 million) or over half of the total capital expenditures for the four-year plan period. Table 1 below gives details.

8. The Budget in Relation to Economic Development Program. For the sake of perspective, a review of certain points is in order. Properly implemented, the Economic Development Program must have accomplished the following by the end of FY 1970:

a) increased the extent and the efficiency of the country's transportation system through the construction and improvement of the country's principal highways, bridges, waterports and airports;

b) solved the serious flood problems of the country;

c) increased the extent and the efficiency of the country's irrigation systems;

d) expanded the capacity for power generation and distribution;

e) improved and extended the country's telecommunication network;

f) established essential industries and agricultural projects to fill the most urgent gaps in the productive structure;

g) improved and expanded the agricultural extension machinery;

h) effectively stopped the wanton and destructive use of the country's natural resources, particularly forest and fish resources;

i) expanded the country's educational facilities to meet the requirements of an increasing population and enhanced the quality and excellence of the present educational system;

j) adequately relieved the need for housing and health facilities both in the urban and the rural areas, and

k) provided adequate equipment for the maintenance of internal and external security.

9. The selection of the specific projects included in this proposed budget was made with these long-term four year goals in mind. All things considered, of the wide range of available projects bidding for implementation, the ones proposed here present the strongest claims on the capital resources of the government for the coming fiscal years.

Table 1
National Government: Projected Fiscal Operations
FY 1967 - 1970
(million pesos)

	1966 (estimate)	1967	1968	1969	1970
Current Basic Expenditures	925.0	1,066.8	1,132.7	1,262.7	1,417.7
Current Operating	610.0	774.1	827.7	925.0	1,050.0
Debt Service	132.0	140.0	155.0	175.0	200.0
Subsidies & Transfers	183.0	152.7	150.0	162.7	167.7
Revenue from Existing Taxes	1,935.0	2,151.1	2,374.0	2,640.0	2,963.0
General Funds	1,578.0	1,755.0	1,940.0	55.0	2,420.0
BIR	870.0	980.0	1,100.0	1,240.0	1,420.0
Customs	580.0	640.0	700.0	770.0	850.0
Others	128.0	135.0	140.0	145.0	150.0
Special Funds	371.0	406.9	440.0	490.0	545.0
Fiduciary Funds	39.0	30.4	31.0	32.0	33.0
Reparations Funds	13.0	14.6	20.0	23.0	25.0
Less: Interfund Transfers	(66.0)	(55.8)	(57.0)	(60.0)	(60.0)
Economic Surplus of Budget Operations	1,010.0	1,084.3	1,241.3	1,377.3	1,545.3
Allotments from NPC Corporate Income	-	32.9	29.1	19.1	5.0
Total	1,010.0	1,117.2	1,270.4	1,396.4	1,550.3
Economic Development Budget	1,233.0	1,661.6	1,760.0	1,850.0	1,960.0
Direct Capital Formation	228.0	535.6	570.0	600.0	650.0
Capital Transfers	66.0	31.8	40.0	50.0	60.0
Development Services	939.0	1,094.2	1,150.0	1,200.0	1,250.0
Development Financing Required	223.0	544.4	489.6	453.6	409.7

NATIONAL GOVERNMENT: PROJECTED FISCAL OPERATIONS
(Million Pesos)
National Income Basis

ITEM	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
A. CURRENT BUDGET					
1. Outlays					
1) Current Outlays	810.0	774.1	827.7	925.0	1,050.0
2) Developmental Services	939.0	1,094.2	1,150.0	1,200.0	1,250.0
3) Interest Payments	67.0	80.0	80.0	90.0	102.0
4) Total Outlays	1,816.0	1,948.3	2,057.7	2,215.0	2,402.0
2. Revenues at Existing Tax Rates					
5) General Fund	1,578.0	1,755.0	1,940.0	2,155.0	2,420.0
6) Internal Revenue	870.0	980.0	1,100.0	1,240.0	1,420.0
i) Projected Income[a]	-	924.0	1,041.0	1,169.0	1,317.0
ii) Increased Collections[b]	-	56.0	59.0	71.0	103.0
7) Customs Duties	580.0	640.0	700.0	770.0	850.0
i) Projected Income[a]	-	610.0	680.0	744.0	818.0
ii) Increased Collections	-	24.0	20.0	26.0	32.0
8) Others	128.0	135.0	140.0	145.0	150.0
9) Less: Inter Fund Transfers	- 66.0	- 55.8	- 57.0	- 60.0	- 60.0
10) Special Funds	371.0	406.9	440.0	490.0	545.0
i) Projected Income[a]	-	394.0	432.0	467.0	521.0
ii) Increased Collections[b]	-	13.0	8.0	23.0	24.0
11) Fiduciary Fund	39.0	30.4	31.0	32.0	33.0
12) Total Revenue	1,922.0	2,136.5	2,354.0	2,617.0	2,938.0
3. Surplus (Deficit)	306.0	188.2	296.3	402.0	536.0
B. CAPITAL BUDGET					
1. Expenditures					
13) Direct Capital Formation	228.0	535.6	570.0	600.0	650.0
14) Capital Transfers	66.0	31.8	40.0	50.0	60.0
15) Debt Repayments	65.0	60.0	75.0	85.0	98.0
16) Other Transfers	183.0	152.7	150.0	162.7	167.7
17) Total Expenditures	542.0	780.1	835.0	897.7	975.7
2. Receipts					
18) Current Surplus	306.0	188.2	296.3	402.0	536.0
19) Allotments from Corp.	-	32.9	29.1	19.1	5.0
20) Reparations Fund	13.0	14.6	20.0	23.0	25.0
21) Total Receipts	319.0	235.7	345.4	444.1	566.0
3. Financial Gap	223.0	544.4	489.6	453.6	409.7

a/ Projected at Growth rate consistent with GNP (6.251)

b/ Increased collections due to administrative efficiency and intensified efforts.

10. *Methods and Criteria for Project Selection.* The projects included in this capital budget have been selected on the assumption that no individual ceilings are imposed on the amount that may be allocated to the economic programs of each implementing department. The over-all rule followed here was to earmark whatever amount was necessary for those projects which rank highest in urgency and therefore cannot be postponed, with an estimate of what reasonable maximum can be raised by the government to finance these projects as the constant and overall constraint.

11. In line with the need for adopting the most rigorous standards of efficiency and foresight both in *preserving* and in *increasing* the nation's real fixed capital facilities, the method of project selection used gives prior importance to the following areas of expenditures:

a) provisions for the proper maintenance and operation of previously constructed facilities, to keep them at reasonable levels of efficiency and to prevent costly deteriorations;

b) the continuation or completion of previously started projects;

c) the repair and rehabilitation of existing but inadequately maintained or neglected facilities;

d) the expansion of available facilities to meet increased demands on their services;

e) the construction of new projects with completed plans, which are of obvious economic desirability, and

f) provisions for the survey work, investigation, and planning necessary for preparing the integrated packages of projects to be launched under subsequent budgets.

12. Special priority was given in all cases to projects for which dollar-financing is available to cover their foreign-exchange requirements, and for which the peso counterpart can be provided to avail of these external resources.

13. It would be relevant to mention that Philippine efforts to get substantial projects going are, at this stage, still somewhat hampered by past and inherited difficulties. The concept of preparing and developing projects in relation to an over-all national program has been effectively introduced only recently and the translation of such a concept into actual operations entails considerable efforts at reorienting the established methods of budgeting, and the development, engineering and financial planning of projects. In the past, most government projects were developed in piece-meal fashion, not as parts of coherent and realistic overall programs; their implementation was further restricted by the imposition of ceilings on departmental programs.

14. It must be emphasized that while this budget was formed out of currently available projects, the work of preparing future projects that are large, multi-purpose, and comprising a unified technical and financial system has been underway for sometime now. We may mention the studies conducted by consultants from the U.S.

Bureau of Reclamation on the seven major river basins of the country, which may serve as a basis for formulating integrated programs for water-resources development, including irrigation, flood control, drainage, and power. Similar survey and preparatory work has been started in other fields, such as the development of industrial estates, the promotion of trade and investments, and particularly, the integrated development of Mindanao. Such unified programs should be the strees of future developmental budgets, for they insure largeer social returns for every peso invested than has the past system of uncoordinated project implementation. This will require a heavier contration of the resources of the government on large-scale integrated projects, a preferable alternative to their dissipation on small, scattered, and unconnected ones.

15. It is anticipated that with the intensification of work on these multi-purpose projects, a substantial amount should be ready for incorporation in the next budget. In the meantime, however, there are ready projects that cannot afford further postponments and must be attended to this fiscal year, the most important of which are provided for in this budget. Their neglect would result in severe and damaging setbacks to the Economic Development Program.

16. To be able to avoid these setbacks, and to properly implement the Program's end-goals, the budgeting processes must adopt a single and unified outlook. The budget, that is to say, should be drawn up not within the restrictions imposed by individual department ceilings, but as dictated by the financial resources required to start and complete the high-priority projects that should

be implemented, many of which will take several years to complete. Furthermore, this budget should embody what must be done this year to be able to achieve the objectives of the total four year period allocated under the Program. Finally, the importance of properly scheduling, in terms of cash flows, the releases to be made in implementation of this budget to facilitate the effective management and control of the entire budgetary program should be stressed.

17. Our commitment to the long-term goals in the Program necesaarily dictates what capital expenditures must be programmed this fiscal year, to make a substantial start toward attaining these objectives. The subsequent budgets will then continue and build from the achievements of the immediately preceding years.

18. In accordance with these principles, this proposed development budget:

a) lines up a series of capital projects for financing durin the next fiscal year;

b) provides for survey work and preparation for projects to be undertaken under subsequent budgets;

c) programs the year's expenditures for necessary developmental services;

d) provides for an industrialization fund to increase the transfer of capital funds to the private sector through the government financial institutions, and

e) measures the need for new sources of finance.

19. It must be stressed, by way of anticipating future budgets, that the initiation of projects under this present one constitues a commitment not only of present funds but also of

whatever future funds are necessary for their completion. The present budget necessarily contains implications for future ones, and the developmental portion of the successive budgets to be adopted for the duration of the Economic Development Program should initiate and complete projects in a continuous and systematic fashion, and provide for their sustained maintenance and efficient operation. This procedure should result by FY 1970, in susbtantial and permanent additions to the country's productive capacity. The successful implementation of the Economic Development Program, it may be submitted, will depend substantially on the government's close adherence to this procedure.

20. The budget for FY 1967-1970 is generally indicative of a two-pronged approach, of fiscal restraint for total expenditures and increased appropriation for capital formation outlays, as stated in past policy speeches of President Marcos. Thus, while the tables show substantial increases in capital formation outlays, the aggregate expenditure program remains relatively modest, when viewed against the massive requirements of an adequate development program. Nevertheless, it is realistic from the viewpoint of resources that can be mobilized and the physical capacity to undertake.

21. The capital formation expenditure programmed represent, fundamentally, the rescheduling of priority projects which in the past were deferred for lack of funds.

22. It should be noted that while the projected revenue gap is ₱1.8 billion, the expenditures programmed represent the critical minimum effort of the government. It should be made clear

that this expenditures program is highly realistic, in that the levels of expenditure are perhaps the lowest that can be programmed without sacrificing essential services, while providing social overhead facilities to maintain reasonable rates of growth.

23. Consistent with the keen awareness of the limited resources that the government can mobilize and generate, a determined effort is being exerted to radically upgrade the productivity of forces and resources employed in providing the activities, services and facilities programmed by the government.

24. This improvement in the productivity of government resources and expenditures will be realized not only by directing resources mobilized by the government toward those capital formation projects and facilities with relatively high social profitability characteristics, but also, and especially by increasing the levels of efficiency and the degree of intensity in the use of these resources.

25. In this regard,two undertakings stand out in significance:

a. The reforms in the administrative structure, machinery and processes of the government; and

b. The reorientation of the military establishment towards increased participation in the development process and its use in implementing economic development projects. This new role of the Armed Forces is treated more expansively in a subsequent section of this program.

26. With regard to the financing of the development gap in the government sector, it is proposed here that external assistance be secured to provide the required resources.

27. A total of about $500 million over the four-year period will thus be required in order that the government's participation in the development program, in the magnitude indicated can be effected.

28. It is further proposed that this development financing be secured through the mechanism of a Program Loan, in the main, in order to generate the pesos required by the development program without endangering the balance of payments and international reserve position of the economy. Possibly this could take form as a Program Loan to the Philippine Government through the Central Bank. This dollar loan through the Central Bank would enable the Central Bank to generate the peso requirements for the development projects without forcing a drawdown on international reserves, endangering the balance of payments, position and the relative stability of expected, but manageable price increases. The pesos generated and the increment in total money supply would be supported by the dollar program loan.

29. It is also pointed out that to the extent that the program loan for financing the development gap is not secured, then the only alternative open would be to cutback on the development program of the government, since financing of these projects through Central Bank borrowings non-supported by the dollar program loan would generate undesirable inflationary pressures on the price levels and especially on the balance of payments and reserves position.

29. This alternative however will, expectedly, have adverse implications on the growth rates of the other sectors of the economy and an the overall level of investments and growth of the economy. This sacrifice in growth, however will not be necessary if the Program Loan can be obtained.

30. In the context of the Philippine experience, the effectiveness and productivity of external assistance is even more enhanced by the general efficiency in the use of total capital resources, relative to other countries. In addition, several other factors have wielded beneficient effects on the productivity of assistance: Political stability and continuity, and increasing levels of governmental effectiveness; rising national marginal savings rates; and the possibility of attracting foreign private investment to finance part of the requirements for external capital.

31. There are strong, compelling reasons to believe that the transition to self-sustaining growth can be significantly shortened, and dependence on external assistance eventually eliminated. The economy in its present stage is on the threshhold of a major break through, and the positive, direct activating of the various economic sub-sectors is a strategic element in the new order. Equally strategic is the role conceived for external capital resources.

32. In this regard, the Administration holds to the principle that external capital should be a catalyst for growth, activating domestic forces and freeing a part of domestic resources so that a greater magnitude of social overhead facilities can be established, and developmental services provided.

33. These are but means to an end. They demonstrate in capsule form the earnest efforts of the administration to use the government sector as an activating and rallying force in the drive toward self-sustaining growth. To the extent that external assistance can be secured in more substantial amounts, then to the same extent domestic resources can be freed for other projects and activities.

Private Sector

34. Of the gross investment totalling ₱20.3 billion projec for FY 1967-70, the private sector accounts for ₱16.9 billion. Tot private savings are projectd to expand by 58 per cent between FY 19 and FY 1970, and cumulate to ₱15.6 billion. The gap that will fina emerge depends on the policies pursued by the Government, particula the extent in which the tax measures will transfer savings to the public sector. From an institutional point of view, the sources of financing for the private sector investments consist of:

	FY 1967-70
Investments, ₱ million	18,600
Financing:	
Funds from abroad	1,700*
Funds from gov't. institutions	1,800
Funds (credit) from comm'l banks**	2,700
Funds from other financial institutions	800
Financing within the sector	11,600

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*Difference between required net inflow and amount going to government from reparations and U.S. AID.

**Based on money supply increasing at 8 per cent a year or ₱1,150 million over the plan period and assuming that the ratio of domestic credit to money supply in December 1965 of 242 per cent will continue through FY 1970. Government investments will absorb ₱100 million.

Foreign Receipts Prospects

35. The size of the gap between gross domestic investment and domestic savings indicates the severity of the constraint imposed on this program by the balance of payments prospects. These are examined below.

Imports

36. After controls on foreign exchange payments and import trad were lifted totally in early 1962, importation of consumer goods decline by 16 per cent in FY 1963 and subsequently expanded by over 29 per cent annually in the subsequent two years. In FY 1966, consumer goods import levelled off, registering an~~d~~ increase of just over 1 per cent over the preceding year level. These developments resulted from reactions to the severe restrictions on consumer goods imports during the regime of cont speculations on the free exchange rate, and improved customs administration in 1966. Over these four years, consumer imports expanded by an average rate of 9.4 per cent a year in line with the increase in consumption (private consumption plus government current expenditures). Since the Program proposes to expand the market segment of the economy at the expense of the subsistence segment, the proportion of imported consumer goods to total consumption expenditures is projected to rise from around 3 per cent in FY 1966 to about 4 per cent in FY 1970.

37. Annual importation of raw materials and supplies similarly fluctuated during the four fiscal years 1963-1966 following decontrol. On balance, however, raw material imports expanded in proportion with the growth in output of the manufacturing sector. The proportional growth in raw material imports to manufacturing production is projected

to continue through the plan period.

38. Importation of capital goods also fluctuated during the past four fiscal years, registering an average expansion of around 8.5 per cent. This rate of expansion was about twice the growth in gross fixed investments in real terms, signifying partly the increasingly capital intensive nature of the investment projects (e.g., fertilizer plant and steelmill). In view of the Government's major construction program for infrastructure facilities, the proportion of capital goods imports to fixed investments is projected to be maintained at the FY 1966 level during the plan period.

38a. Taking all these into consideration, the value of imports is projected to increase by about 10.2 per cent yearly compared to the growth in GNP of about 6.2 per cent a year.

PROJECTED LEVEL OF IMPORTS
(US $ MILLION)

Item	FY 1966*	FY 1970
Capital Goods	145	270
Raw Materials and Supplies	531	730
Consumer Goods	130	200
Total	806	1,200

721

800
380
968
[illegible]
[illegible] 10% per yr

*Estimate

Exports

38 b. Export receipts registered impressive gains in the past four years, rising from the pre-decontrol annual level of $595 million to $740 million in FY 1964 and FY 1965 and thence to $830 million in

FY 1966. The growth in export receipts, averaging 8.6 per cent a year, was brought about by the expansionary effects of the removal of controls on international transactions and the devaluation of the currency (by 49 per cent) as well as the rise in world prices. The latter resulted from a combination of events such as the failure in Cuban sugar production in 1963, inflationary tendencies in many of the industrial countries and the Vietnam war.

39. Due to the still unsettled international economic and political situation, it is difficult to forecast export receipts with confidence. However, several factors are likely to dampen the increase in export receipts during the plan period. Firstly, the expansionary impulse from decontrol and devaluation will have petered out. Secondly, the rate of deforestation is being subjected to government control. Thirdly, the country's market for her coconut products is being penetrated by soybean exports from the United States and groundnuts from Africa while abaca will continue to suffer from adverse technological developments. Finally, the inflationary situation in the industrial countries may be expected to be brought under control. Consequently, export receipts are projected to expand by about 3 per cent during the plan period.

40. Non-merchandise payments and receipts in the current accounts are even more difficult to project. Non-merchandise receipts expanded from $168 million in FY 1961 to $664 million in FY 1966 while non-merchandise payments rose from $128 million to $727 million during the same period. On balance, the surplus of $40 million in non-merchandise transactions in FY 1961 swung into a deficit of $63 million in FY 1966. This adverse development was partly a natural consequence of the lifting

of controls on international transactions. It reflects the volume of earnings and assets of aliens in the economy. It also reflects the recurring speculations on the free exchange rate. Wiht the establishment of the par value of the peso inlate 1965 and the emergence of stronger business confidence with thenew administration, to the extent that the latter will be maintained, such speculations are not expected to recur during the plan period. One of the important factors behind the expansion in non-merchandise receipts was the Vietnam War. Deficits in the non-merchandise transactions are thus projected to remain at their FY 1966 level of $65 million a year during the plan period.

41. Taking all these into consideration the country's current international transactions during the plan period are expected to deteriorate from the estimated deficit of $9 million in FY 1966 to $305 million in FY 1970.

PHILIPPINES: BALANCE OF PAYMENTS, FY 1966 - FY 1970

(US $ MILLION)

Item	FY 1966	FY 1970	Cumulative Total FY 1966-FY 1970
Merchandise Exports	836	935	3,590
Merchandise Imports	806	1,200	4,280
Trade Balance	30	- 265	- 690
Other Current Transactions (net)	39	- 40	- 160
Current Balance	- 9	- 305	- 850

Table 2
Projected Savings-Investment Gap
FY 1967-1970
(Million Pesos)

	FY 1967	FY 1968	FY 1969	FY 1970	Four-Year Total 1967-1970
Investment:	4,070	4,680	5,360	6,160	20,270
Private	3,290	3,863	4,484	5,220	16,857
Government	780	817	876	940	3,413
Savings:	3,591	3,988	4,442	5,005	17,026
Private	3,403	3,692	4,040	4,469	15,604
Government	188	296	402	536	1,422
Gap:	479	692	918	1,155	3,244
Private	(65)	202	464	746	1,347
Government	544	490	454	409	1,897

Summary

The Program sets as a target the growth of national output at an annual average rate of 6.2 per cent during the 4-year plan period. This rate of growth compares with 4.7 average increase registered in the preceding four fiscal years. To attain this higher rate of growth, the investments required would rise from 16.1 per cent of GNP in FY 1966 to 23.5 per cent in FY 1970. In comparison, savings are expected to expand from the current rate of 16.0 per cent of GNP to 19.0 per cent by FY 1970. Consequently, a savings-investment gap averaging ₱830 million a year is anticipated during the plan period.

Projections of the country's balance of international payments show that, excluding official borrowings and grants, foreign exchange earnings available for imports will rise from $705 million in FY 1966 to $910 million in FY 1970. This increasing magnitude stems from the expected growth in exports at the rate of 3 per cent a year and a decline in scheduled repayments on official borrowings and registered private foreign indebtedness. In FY 1966, imports amounted to $805 million and were financed partly by official borrowings and grants of $230 million.

If the production and investment goals are to be achieved, the savings-investment gap will have to be filled by either or both external developmental financial and a reduction of the projectd consumption levels. In the case of the public sector, the national consumption may be reduced by increasing government savings out of the anticipated revenues at existing tax rates, raising additional revenues through additional taxation on private consumption and depressing consumption implicitly through price increases induced by an expansionary fiscal and monetary policies.

VI. CIVIC ACTION PROGRAM FOR THE ARMED FORCES OF THE PHILIPPINES

CAPABILITIES OF THE ARMED FORCES FOR IMPLEMENTING ECONOMIC DEVELOPMENT PROJECTS

1. The successful implementation of the Development Program calls for nothing less than the total mobilization of the nation's manpower and material resources. The Armed Forces of the Philippines with its manpower, material and equipment resources plus its organizational cohesiveness and discipline possess a tremendous potential to participate in such implementation which should be exploited to the maximum.

2. This is recognized in the State of the Nation Message of the President when he proposed "to mobilize the manpower, materials and equipment resources of the Armed Froces to assist in the execution of our social and economic program---" Under this policy, a massive contribution towards economic development is expected from the Armed Forces. Such a contribution becomes an imperative considering that the major problem besetting the country is a socio-economic rather than a military one and that the resources available to solve this problem are scarce and limited.

3. However, the mobilization of the Armed Forces' resources for economic development is not intended to detract from its all important military mission of providing for our security and the present anti-smuggling drive. Such mission will continue to be

pursued with relentless vigor and intensity. The utilization of the Armed Forces for economic development is intended, rather, to imbue in the military organization a dual capability of providing for our economic well-being as well as our military strength. The Armed Forces is therefore being assigned, aside from its military program, a civic-action program that will utilize to the fullest extent its capabilities as a complementary instrument for implementing the Development Program.

4. That these capabilities are valuable, well-developed and in some instances unique, is an accepted fact. The Armed Forces in the process of striving to approximate the model of its industrial-based American counterpart has acquired equipment and developed specialists and advanced procedural techniques which are either non-existent or in short supply in both the public and private sector. It would be a tragic waste not to take full advantage of these competencies and material resources in the development of our country.

5. To enumerate some of these capabilities, the Armed Forces has first of all the engineering capability to undertake vital infrastructure projects such as roads, bridges, pre-fab school houses, irrigation, and well drilling. Eventually, this capability will be expanded to cover river control, portworks, reclamation, and airports projects.

6. The flexibility in personnel and equipment of the basic engineering unit, the engineer construction battalion, gives it the capability to undertake varied projects at minimum costs. Its personnel composition, whereby forty percent will consist of the

military personnel and sixty percent civilian personnel to be hired on a need basis, will provide our rural population with employment opportunities and skill training during the non-farming season. Moreover, the engineer construction battalions will have the advantage of being able to work in areas where the peace and order situation is abnormal or in remote and isolated areas where pioneering work is required.

7. Aside from this engineering capability, the land, sea and air transportation system of the Armed Forces is a potent force that could be tapped for economic development. This system possesses the capacity not only to operate vehicles, vessels and aircraft but also to maintain and repair such transport units.

8. Related to this transportation capability is the communication capability of the Armed Forces. The AFP has one of the most, if not the most, advanced, efficient and far-flung communication and reporting network in the nation. It also has capabilities for aerial photogrammetry, cadastral survey and hydrographic survey. In addition, the self-supporting nature of AFP units scattered throughout the country makes the AFP a valuable instrument for participating in community development activities.

9. Finally, the training and planning competencies of the Armed Forces should bot be overlooked. Since training is a basic function of the military organization, this capability can be utilized not only for military training but also for training in industrial skills and for anti-subversion and anti-insurgency education.

CURRENT SITUATION AND CONCEPTS FOR ARMED FORCES UTILIZATION IN ECONOMIC DEVELOPMENT

10. Heretofore, AFP participation in economic development has been piecemeal, small-scale, unintegrated, and "one-shot" in nature. Such participation has included the development of the EDCOR resettlement farms for the rehabilitation of ex-dissidents, food production of the "backyard gardening" type, assistance in community development and rural upliftment projects, and construction of feeder roads, pre-fab school houses, and artesian wells.

11. Lacking direction, continuity, integration with the national development program, and concentration of effort, these projects have neither taxed the potential of the Armed Forces nor made any impact on the development programs. In many instances such as feeder roads and well-digging projects which rapidly deteriorated into uselessness, resources were actually wasted since no provision was made for their maintenance.

12. The proposed civic action program is designed to avoid these mistakes of the past. It will first of all seek to build solid foundations in the economy and not just the superstructure. Secondly, projects to be undertaken must be fully integrated with the Development Program and carried on to completion. Thirdly, while the Armed Forces participation will assist or complement civilian agencies concerned, such participation will be massive, concentrated and involving the full mobilization of the Armed Forces' resources. Finally, the Armed Forces will undertake this civic action program as a permanent

function so that funding for its activities can be programmed on a continuing rather than a short-term basis.

13. Thus, the civic action program as set forth herein will constitute an important adjuct to our development plans.

OBJECTIVES OF THE PROGRAM

14. General Objective. - To participate actively and directly in the implementation of the Four Year-Development Program to the fullest extent of the Armed Forces' capabilities.

15. Specific Objectives - To assist or complement civilian agencies concerned in projects or activities indicated in the Development Program, of the following types:

a. Infrastructure

b. Economic planning and program execution

c. Regional and industrial site planning and development

d. Community development, rural upliftment and land resettlement

e. Manpower training for industrial skills and anti-subversion education for rural population

f. Repair/rebuild of vehicles, vessels and aircraft

16. PROJECTS

1. Infrastructure

a. Road construction - Construct roads according to the type and schedule indicated in the following table.

Fiscal Year and Length of Roads (in kms.)

	FY 1967	FY 1968	FY 68-69	FY 69-70
Concreting	60	60	100	100
Developmental Roads	--	150	300	300
Feeder Roads	100	150	200	250

b. Irrigation Development - Construct and/or repair at least six (6) irrigation systems in areas to be designated.

c. Pre-fab school house construction - Construct 2,000 units annually for the next four (4) years good for 16,000 classrooms.

d. Portworks and airports construction - Undertake the development or repair of such portworks and airports that may be assigned to the Armed Forces.

e. Dredging and reclamation - Undertake such dredging and reclamation projects as may be assigned to the PN.

To undertake the above-mentioned projects, the existing three (3) engineer construction battalions will be increased to ten (10) battalions and possibly one (1) Navy "Seabees" Battalion and one (1) Air Force Construction Battalion.

17. Reporting of Economic Data and Information - The communication and reporting system of the PC will be geared to providing economic planning and program execution agencies with desired economic data and information.

18. Regional and Industrial Site Planning and Development

Photgrammetry, cadastral and hydrogenphic surveys will be undertaken by the PAF, PN and PA respectively on a need basis for regional development authorities. Such authorities will also assign to Military Area Commanders concerned specific planning responsibilities for the development of their respective Areas.

19. Community Development and Rural Upliftment. -

a. PA and PC will participate jointly with PACD and National Land Reform Agencies in the "Civic Action Center Program" for the rural population according to the following program:

	FY 1966 (Actual)	FY 1967	FY 1968	FY 1969	FY 1970
No. of Civic Action Centers	10	18	26	34	42
No. of barrio leaders to be trained	6,000	10,800	15,600	20,400	25,200

b. Participate with the same agencies in following-up action and assistance in community self-help projects to be undertaken by the barrios concerned under the leadership of those trained in the Civic Action Centers.

c. Participate with agencies concerned in "Operations Central Luzon"

d. Provide education to barrio population to combat subversion and insurgency

20. Land Resettlement - Phase out existing EDCOR Farms and carry out or assist civilian agencies concerned in such land resettlement projects as may be assigned to the AFP for execution.

21. Repair/Rebuild of Vehicles, Vessels and Aircraft

a. AFP Base Shop - Operate this shop to its maximum capacity so that it can service not only AFP vehicles but those of civilian government agencies and possibly private companies and the requirements of Vietnam.

b. Navy Ship Repair Yard - Expand this facility to accommodate heavier tonnage and operate this facility to its maximum capacity so that it can service not only PN vessels but also civilian vessels.

c. PAF Aircraft Maintenance Facilities - Expand these facilities so they can service all PAF aircraft and possibly civilian aircraft.

22. Manpower Training for Industrial Skills

a. Establish and operate a military-technical school to train military personnel in civilian vocational skills. This project can possibly be assisted by SEATO which has sponsored similar projects in Thailand.

b. Accelerate trianing of 20-year olds to include a substantial portion to be trained in military technical skills that are identical with or allied to civilian industrial skills.

23. Development of Air and Naval Bases that will Serve Both Military and Civilian Needs

In accordance with the force base development program of the AFP, air and naval bases to be developed thereunder will be located in areas which are of high strategic importance, military and economically. Such bases will have separately located facilities for military and civilian needs to comply with security considerations. During the next four years, the following such bases will be developed:

a. Air Bases - One (1) air base and two (2) staging/recovery bases, in sites to be determined.

b. Naval Bases - One (1) naval operating base and two (2) naval stations, in sites to be determined.